VWR
We Enable Science

VWR INTERNATIONAL

LABORATORY CATALOGUE

2015

RL Slaughter
For All Your Laboratory Needs

APPARATUS | INSTRUMENTS
EQUIPMENT | CONSUMABLES

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These symbols indicate important product features:

- Explosion proof
- RS232 interface
- Ethernet interface
- Autoclavable
- Sterile
- Accessories required to use the product
- Requires specialist installation
- Item is heavy and difficult to transport
- Product requires chemicals or reagents
- Documentation available on request
- USB connection
- Selected for you

IVD — CE marking conform with IVD MDD 98/79 EC for In-vitro Diagnostics

2 year warranty, 3 year warranty, 4 year warranty, 5 year warranty — Warranty

IP 21, IP 31, IP 55, IP64, IP65, IP66, IP67, IP68 — IP Classification

SPECIAL APPLICATIONS

Here you will find all the articles required for special analysis such as environmental/water anaylsis, microbiology or biotechnology analysis.

Environmental, water and food analysis

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PALL Life Sciences

Groundwater sampling filter capsules, GWV

GWV High Capacity Capsules are designed for the preparation of groundwater samples for dissolved metals analysis. 42 Metals Analysis Certification is printed on each package.

- Meets filtration requirements of the U.S. EPA. for 0,45 µm filtration
- Reduces the need for multiple filter changes when filtering silt and particulate laden groundwater and ensures rapid filtration
- GWV provides 5 times the filtration area of conventional 142 mm filters

GWV membrane (acrylic copolymer on a non woven support) in a PP housing.

Filtration area (cm^2)	700 cm^2
Inlet/outlet	1/8" MNPT
Ø×L (mm)	64×114
Max. temperature (°C)	88
Max. pressure (bar)	3,4

Type	Pore size (µm)	Pk	Cat. No.
GWV	0,45	10	**516-7533**
GWV	0,45	50	**516-7534**
GWV	1	10	**516-7510**
GWV	1	50	**516-7511**
GWV	5	10	**516-7508**
GWV	5	50	**516-7512**

PALL Life Sciences

Groundwater sampling devices, AquaPrep™

AquaPrep™ devices are designed for the preparation of groundwater samples, with relatively low levels of particulate matter, for dissolved metals analysis and to provide a cost effective alternative to the GWV high capacity capsules for light sediments.

- Meets filtration requirements of the U.S. EPA. for 0,45 µm filtration
- Self-contained, disposable units eliminate the time and hazards associated with cleaning filter holders

AquaPrep™ device: Thermopor membrane (polyester reinforced PS), PP housing.

AquaPrep™-V device: Versapor® membrane (acrylic copolymer on a non woven support), PP housing.

Type	AquaPrep™	AquaPrep™ -V
Filtration area (cm^2)	19,6	
Inlet/outlet	Stepped hose barb accepts 6,4 - 12,7 mm I.D. tubing	1/8" MNPT
Ø×L (mm)	73×82	
Max. temperature (°C)	60	
Max. pressure (bar)	5,1	

Type	Pore size (µm)	Pk	Cat. No.
AquaPrep™	0,45	20	**300-0010**
AquaPrep™ -V	0,45	20	**300-0011**
AquaPrep™ -V	0,45	100	**516-7606**

ALL YOU NEED FOR CHEMICAL ANALYSIS

A great companion for chemists in any industry

- Sampling and sample preparation
- Spectroscopy, chromatography and physical measurement
- Waste and hazard management

Request your copy from your local VWR sales office or vwr.com

PALL Life Sciences

Sampling filter capsules, Acrocap™

The Acrocap™ devices are widely used for the preparation of groundwater samples with low levels of particulate matter for general and dissolved metals analysis.

- Removes air, particulates and microbial contamination
- Supor® membrane in modified acrylic housing
- Two disposable formats available - 'in-line' or 'bottle top'

Acrocap™ filter (516-9104)

Effective filtration area: 15 cm^2 ; vent 0,02 µm supported PTFE; maximum pressure 2,04 bar.

Inlet/outlet: Hose barb 6,4 mm. I.D. conforms to ISO 594 FSL.

Acrocap™ Positive pressure devices (515-0009, 515-0010 and 515-0011)

Effective filtration area: 15 cm^2; vent 0,02 µm PTFE; maximum pressure 2,1 bar; W×D×H (mm): 68,8×40,9×34,5.

Inlet/outlet: Hose barb 6,4 mm, inner taper accepts male Luer slip, removable filling bell attached to outlet.

Pore size (µm)	Filtration area (cm^2)	Pk	Cat. No.
0,1	15	10	**515-0010**
0,2	15	10	**515-0009**
0,45	15	10	**515-0011**
0,45	15	200	**516-9104**

Sampler, portable, PB 6 series

WTW

Portable sampler with peristaltic pump and integrated rechargeable battery for universal use in the field. The sampler is ready to use right away as the filling tube is connected by means of the quick coupling. Setting the sample volume and interval is easy and convenient with the dial. Heavy duty rollers and retractable handles make it easy to transport. Extremely robust design in Peli case.

- All relevant parameters are shown on the display
- Easy to transport
- Compact, robust design

Model	PB 6-2
Sample size (ml)	50 - 2000
Programs	Start delay: 16 settings from 0 to 12 h; sampling interval: 15 settings from 5 min. to 12 h
Housing	UV resistant PVC
Power requirements	Battery: 12 V, 5 Ah acid battery
W×D×H (mm)	457x254x560
Weight (kg)	13,6
Bottle capacity	2x3 l

Description	Pk	Cat. No.
PB 6-2, Portable sampler for field testing of two sample locations, incl. 2×4,5 m filling tubes with perforated baskets, battery charger and 2×3 l sample containers	1	**701-0117**

Water sampler, portable, TP 5 P
Maxx

TP 5 P

A robust, battery operated, portable sampler that can be combined with any type of composite sample container as well as with the optional passive or active insulating boxes. The sample collection is automatic with a diaphragm pump vacuum system, using simple programmable microprocessor control with an adjustable 20 to 350 ml sample volume system.

- Very tough plastic housing
- The device is highly mobile and independent of mains power with an integral 12 V battery
- Programming can be time-, flow- or event-related
- Manual sample extraction without interruption of programme
- ~2000 sample extractions per battery charge (20 °C, 1,5 m height, 1 min sampling interval)

Delivery information: The device (without battery charger) includes 5 m suction hose with threaded connection and sinker weight.

Model	TP 5 P
Accuracy (%)	<2.8 (single sample volume)
Communication interface	Optional: LAN/WLAN via TCP/IP RJ45, with IE-Browser, memory 4-32GB SD/SDHC
Control	Microprocessor control, Sleep-Mode (<5mA), power supply 8-16 V foil keyboard (with keys 0-9, ESC, ENT, cursor), graphical display (128×64 Pixel), backlit
Datalog	3000 entries; non volatile data memory for storage of sampling data and messages
Housing	PS/PC (GF10)
Interfaces	Mini-USB, RS422/485, RS232
Programs	12 freely programmable user programs, with function to link programs
Sample size (ml)	20 - 350
Signal input	2× analogue; 8× digital
Signal output	Up to 8× digital, 5 are freely programmable
Weight (kg)	10
W×D×H (mm)	452×222×442

Description	Pk	Cat. No.
TP 5 P, portable water sampler	1	**701-0167**

Description	Pk	Cat. No.
Accessories		
PE composite container, 10 litre with closure	1	**701-0075**
PE composite container, 25 litre with closure	1	**701-0076**
Freezer pack, 16× 1 l	1	**701-0250**
PE bottle 1 litre	1	**701-0077**
Cap for PE bottle 1 litre	1	**701-0078**
Cable to charge the removed storage battery	1	**701-0079**
Flow signal cable, 10 m	1	**701-0080**
Battery charger IP 65 (splash-proof)	1	**701-0081**
Filter basket	1	**701-0082**
Suction hose, 5 m	1	**701-0083**
Insulating box, empty for transport	1	**701-0086**

Water samplers, portable, TP 5 C
Maxx

TP 5 C in a case

A portable, battery operated, and compact automated water sampler with a diaphragm pump vacuum collection system. The standard version has an integrated insulated container and distributor for 24×1 litre PE bottles and the sample collection is achieved with programmable microprocessor control.

Other versions of the sampler are available for different container/bottle sizes; 25 litre; 4×5 litre and 1×10 litre and for these variants there is the additional option of cooling using freezer packs in the insulated container. Cooling of collected samples is possible with optional compressor cooling (please contact VWR for further details).

- Easy to transport with carrying handles
- Battery provides independence from mains power
- Sample programming can be time-, flow-, or event-related
- Manual sample extraction without interruption of programme
- ~2000 sample extractions per battery charge (20 °C, 1,5 m height, 1 min sampling interval)

Ordering information: A battery charger is required, please order separately.

Delivery information: The device (without battery charger) includes 5 m suction hose with threaded connection and sinker weight.

Model	701-0169	701-0170	701-0171	701-0168
Accuracy (%)	<2,8 (single sample volume)		<2.8 (single sample volume)	<2,8 (single sample volume)
Communication interface	Optional: LAN/WLAN via TCP/IP RJ45, with IE-Browser, memory 4-32GB SD/SDHC			
Control	Microprocessor control, Sleep-Mode (<5mA), power supply 8-16 V foil keyboard (with keys 0-9, ESC, ENT, cursor), graphical display (128×64 Pixel), backlit			
Datalog	3000 entries; non volatile data memory for storage of sampling data and messages			
Housing	PS/PC (GF10)			
Interfaces	Mini-USB, RS422/485, RS232			
Programs	12 freely programmable user programs, with function to link programs			
Sample size (ml)	20 - 350			
Signal input	2× analogue; 8× digital			
Signal output	Up to 8× digital, 5 are freely programmable			
Weight (kg)	25			
W×D×H (mm)	510×468×787			

Description	For bottles (ml)	Pk	Cat. No.
TP 5 C water sampler	4×5000	1	**701-0169**
TP 5 C water sampler	1×10000	1	**701-0170**
TP 5 C water sampler	24×1000	1	**701-0171**
TP 5 C water sampler	1×25000	1	**701-0168**

Description	Pk	Cat. No.
Accessories		
Battery charger IP 65 (splash-proof)	1	**701-0081**
Suspension bar for use in sewers	1	**701-0115**

Insulating boxes for TP 5 P including bottles/containers
Maxx

The insulating boxes in the table below each have an integral distributor for the relevant bottle configuration. The TP 5 P sampler is simply mounted on the lid of the insulating box.

Ordering information: For details of insulating boxes for other container sizes and for active cooling options please visit www.vwr.com or contact your local VWR sales office.

Description	Pk	Cat. No.
Insulating box, 24x1000 ml	1	**701-0084**
Insulating box, 1x25000 ml	1	**701-0085**
Insulating box,1x10000 ml	1	**701-0087**

Liquid alarm

It can be used to detect when drums, tanks, flasks, or beakers are close to overfilling. The moment a solution touches the sensor, the alarm sounds and a red light flashes continually until the liquid no longer touches the sensor.

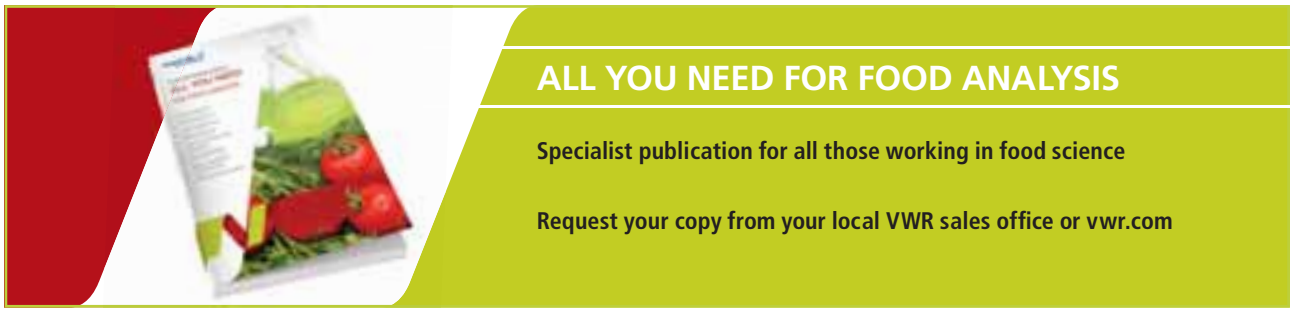
- Sensor on the floor to detect any spill
- Constant alarm for over 30 hours
- Supplied with 10 m cable

W×D×H: 46×76×19 mm

Weight: 70 g

Delivery information: Supplied with a 9 V battery.

Description	Pk	Cat. No.
Liquid alarm	1	**705-0706**



Distillation and separation apparatus, behrotest® Kompact

Behr

Complete sets of equipment for preparation and distillation for commonly required analyses of solid and aqueous samples.

- Simple and convenient to use: All apparatus is delivered already mounted on stands with tubing connections pre-installed - no more tedious fiddling with clamps and mountings
- Space saving: All apparatus is mounted on a compact 23×27 cm base plate, including the units for dual sampling
- Analytical reliability: All components comply with the applicable official analytical procedures and safety standards

Description	Type	Pk	Cat. No.
Complete Kompakt system for soxhlet extraction, 30 ml. Single sample apparatus, includes stand, heating mantle, hoses and glassware (round bottom flask, extractor, Dimroth reflux condenser)	KEX 30	1	**705-0000**
Complete Kompakt system for soxhlet extraction, 100 ml. Single sample apparatus, includes stand, heating mantle, hoses and glassware (round bottom flask, extractor, Dimroth reflux condenser)	KEX 100	1	**705-0001**
Complete Kompakt system for lipid extraction, 100 ml. Single sample apparatus, includes stand, heating mantle, hoses and glassware (round bottom flask, extractor, Dimroth reflux condenser)	KEX 100 F	1	**705-0002**
Complete Kompact system for aqua regia digestion of heavy metal samples. Single sample apparatus, includes stand, heating mantle, glassware and hoses	KSMA	1	**705-0003**
Complete Kompakt system for the separation phase of total cyanide determination. Single sample extraction apparatus, includes stand, heating mantle, airflow rate meter, mounting, tubing and glassware	KTC	1	**705-0004**
Complete Kompakt system for the separation of readily liberated cyanides. Single sample apparatus includes stand, airflow meter with mounting, tubing and glassware	KLFC	1	**705-0005**
Complete Kompakt system for the separation of readily liberated cyanides. Dual sample apparatus, includes stand, airflow meters with mountings, tubing and glassware	KLFC 2	1	**705-0006**
Complete Kompakt system for the separation of soluble and readily liberated sulphides. Single sample apparatus, includes stand, airflow meter with mounting, tubing and glassware	KSTA	1	**705-0007**

Kjeldahl tablets

Kjeldahl catalyst reagents in a convenient tablet form with a range of tablets to suit general and specific applications.

Note: Most of these materials are hazardous. Please read the Material Safety Data Sheets prior to use.

Description	Contents	Ø (mm)	For	Pk	Cat. No.
Antifoam S tablets, ca 1 g	Na_2SO_4; Silicone antifoam	10	Suppression of foam during distillation	1.000 Tab.	**705-0543**
Kjeltabs M, ca.5,25 g	K_2SO_4; HgO	10	Kjel-Foss	1.000 Tab.	**705-0544**
Kjeltabs S, ca. 5 g	K_2SO_4; Se	20	Where a trace of selenium is required	1.000 Tab.	**705-0510**
Kjeltabs ST, ca. 3,5 g	K_2SO_4; Se	16	Where a trace of selenium is required on a smaller scale	1.000 Tab.	**705-0511**
Kjeltabs SQ, ca. 1,5 g	K_2SO_4; Se	11	Semi-microsystems where trace of Se is required	1.000 Tab.	**705-0512**
Kjeltabs AUTO, ca. 1,5 g	K_2SO_4; Se	11	Semi-micro digestions prior to auto-analysis	1.000 Tab.	**705-0545**
Kjeltabs W, 5 g	Na_2SO_4; $CuSO_4.5H_2O$; Se	20	Wieninger method	1.000 Tab.	**705-0513**
Kjeltabs C, ca. 5,1 g	K_2SO_4; Cu	20	General purpose where trace of Cu is required	1.000 Tab.	**705-0514**
Kjeltabs CX, 5,5 g	K_2SO_4; $CuSO_4.5H_2O$;	20	Where Cu is required	1.000 Tab.	**705-0515**
Kjeltabs CK, 3,9 g	K_2SO_4; $CuSO_4.5H_2O$;	16	In Tecator, Gerhardt and Bucchi systems	1.000 Tab.	**705-0516**
Kjeltabs CQ, 1,65 g	K_2SO_4; $CuSO_4.5H_2O$;	11	Semi-microsystems for general purpose	1.000 Tab.	**705-0517**
Kjeltabs CT, 5,3 g	K_2SO_4; $CuSO_4.5H_2O$; TiO_2	20	N_2 determinations in cereals	1.000 Tab.	**705-0518**
Kjeltabs TCT, ca.3,7 g	K_2SO_4; $CuSO_4.5H_2O$; TiO2	16	Semi-microsystems for cereal grains and brewing	1.000 Tab.	**705-0519**
Kjeltabs CTQ, ca. 1,6 g	K_2SO_4; $CuSO_4.5H_2O$; TiO_2	11	Semi-microsystems for N_2 determinations in cereals	1.000 Tab.	**705-0546**
Kjeltabs IB61, 5g	K_2SO_4; $CuSO_4.5H_2O$; Se	20	Acc to 1961 recommendations of Institute of Brewing	1.000 Tab.	**705-0520**
Kjeltabs NAS, ca. 1,0 g	Na_2SO_4; Se	13	General purpose	1.000 Tab.	**705-0547**
Kjeltabs NACT, ca. 1,1 g	Na_2SO_4; $CuSO_4.5H_2O$; TiO_2	13	General purpose	1.000 Tab.	**705-0548**
Kjeltabs KS, 5,0 g	K_2SO_4; Se	20	General purpose	1.000 Tab.	**705-0549**
Kjeltabs KW, 5 g	K_2SO_4; $CuSO_4.5H_2O$; Se	20	Improved Wieninger method	1.000 Tab.	**705-0521**

Indicator paper in rolls, DOSATEST®

DOSATEST® pH indicator test papers give very good precision and are very easy to read because they have 2 colour zones. The hydrophobic barrier between the zones ensures a distinctive separation of colour bands and facilitates the estimation of intermediate values when used with the colour scale provided.

- Supplied as 5 m × 10 mm rolls (*except the 3 zone 35307.600 which is 6 m × 14 mm)
- Wide and narrow pH ranges available

Description	pH range	pH gradation	Pk	Cat. No.
pH indicator paper, DOSATEST®	1,0 - 12,0	1	5 Roll	**35300.606**
pH indicator paper, DOSATEST®	1,0 - 4,3	0,3	5 Roll	**35301.600**
pH indicator paper, DOSATEST®	3,5 - 6,8	0,3	5 Roll	**35302.603**
pH indicator paper, DOSATEST®	5,0 - 8,0	0,3	5 Roll	**35303.606**
pH indicator paper, DOSATEST®	1 - 11,0*	1	5 Roll	**35307.600**
pH indicator paper, DOSATEST®	7,0 - 10,0	0,3	5 Roll	**70035.607**
pH indicator paper, DOSATEST®	9,5 - 14,0	0,5	5 Roll	**70036.601**

pH indicator papers

The traditional pH indicator test papers, supplied on a 4,8 m roll, consist of high quality filter paper impregnated with indicator and mixed indicator solutions then dried and cut to size.

- Roll format are easy to use and most common ranges are available in a refill format
- Quality assurance - tests are checked and calibrated against certified buffer solutions
- Wide and narrow pH ranges available

Description	pH range	pH gradation	Pk	Cat. No.
Acilit®	0,5 - 5,0	0,5	3 Roll	**1.09560.0003**
Alkalit®	9,5 - 13,0	0,5	3 Roll	**1.09562.0003**
Congo paper (pH<3 blue-violet / >5 red-orange)	-	-	3 Roll	**1.09514.0003**
Litmus paper blue (pH<7 red / >7 blue)	-	-	3 Roll	**1.09486.0003**
Litmus paper red (pH<7 red / >7 blue)	-	-	3 Roll	**1.09489.0003**
Neutralit®	5,5 - 9,0	0,5	3 Roll	**1.09564.0003**
pH Box (Acilit®, Alkalit®, Neutralit®)	0,5 - 13,0	0,5	3 Roll	**1.09565.0001**
Phenolphthalein paper (pH<8,5 colourless / >8,5 red)	-	-	3 Roll	**1.09521.0003**
Replacement rolls for Acilit®*	0,5 - 5,0	0,5	6 Roll	**1.09568.0001**
Replacement rolls for Alkalit®*	9,5 - 13,0	0,5	6 Roll	**1.09570.0001**
Replacement rolls for Neutralit®*	5,5 - 9,0	0,5	6 Roll	**1.09569.0001**
Replacement rolls for pH 1 - 14*	-	1	6 Roll	**1.10232.0001**
Special indicator	3,8 - 5,4	0,2 - 0,3	3 Roll	**1.09555.0003**
Special indicator	5,4 - 7,0	0,2 - 0,4	3 Roll	**1.09556.0003**
Special indicator	6,4 - 8,0	0,2 - 0,3	3 Roll	**1.09557.0003**
Special indicator	8,2 - 10,0	0,2 - 0,4	3 Roll	**1.09558.0003**
Universal indicator	1 - 14	1	3 Roll	**1.10962.0003**
Universal indicator, including colour scale	1 - 10	1	3 Roll	**1.09526.0003**
Universal indicator**	1 - 10	1	300 Tests	**1.09525.0003**
Universal indicator replacement rolls only*	1 - 10	1	6 Roll	**1.09527.0001**

* no colour scale card supplied
** pack of 3×100 strips

Indicator strips, non bleeding

Non bleeding special indicator dyes that are covalently bound to the reagent paper and then adhered to plastic strips.

Description	pH range	Pk	Cat. No.
Indicator strips, non bleeding	0 - 6,0	100	**315052J**
Indicator strips, non bleeding	0 - 14	100	**315082P**

pH indicator strips, MColorpHast™

These test strips contain special indicator dyes that are covalently bound to the reagent papers which are then adhered to plastic strips.

- Non bleeding - do not contaminate the solution to be measured
- Quality assurance - tests are checked and calibrated against certified buffer solutions
- Wide and narrow pH ranges available

Description	pH range	pH gradation	Pk	Cat. No.
pH indicator strips	7,5 - 14,0	0,5	100 Tests	**1.09532.0001**
pH indicator strips	5,0 - 10,0	0,5	100 Tests	**1.09533.0001**
pH indicator strips	0 - 6,0	0,5	100 Tests	**1.09531.0001**
pH indicator strips, mid range	2,0 - 9,0	0,5	100 Tests	**1.09584.0001**
pH indicator strips for turbid solutions	2,0 - 9,0	1	100 Tests	**1.09502.0001**
pH strips, individually wrapped (without colour scale)	2,0 - 9,0	1	1.000 Tests	**1.09450.0010**
Special pH indicator strips	0 - 2,5	0,3 - 0,5	100 Tests	**1.09540.0001**
Special pH indicator strips	2,5 - 4,5	0,2 - 0,5	100 Tests	**1.09541.0001**
Special pH indicator strips	4,0 - 7,0	0,2 - 0,5	100 Tests	**1.09542.0001**
Special pH indicator strips	6,5 - 10,0	0,2 - 0,5	100 Tests	**1.09543.0001**
Special pH indicator strips	11,0 - 13,0	0,2 - 0,5	100 Tests	**1.09545.0001**
Universal indicator strips	0 - 14	1	100 Tests	**1.09535.0001**

Test papers

Description	Pk	Cat. No.
Lead(II) acetate paper	3 Roll	**1.09511.0003**
Potassium iodide-starch paper, Reag.Ph.Eur.	3 Roll	**1.09512.0003**

Test strips, MQuant™

MQuant™ (MQ) test strips can be considered as a mobile laboratory on a few square millimetres of plastic strip. As a screening method they provide the user with a rapid overview of the situation, which helps in making the choice of what, and perhaps if, further analysis is required, possibly leading to substantial savings in time and analytical resources. The strip is a biologically degradable polyester foil and the low reagent content in the reaction zones offers problem-free waste disposal.

- Easy to handle: Just dip, wait and measure visually against colour scale
- Safe: No auxiliary reagents necessary for most kits
- Immediate results within a few minutes enables fast decisions
- Portable: Can be used inside or outside the laboratory

Description	Range	Pk	Cat. No.
Aluminium test	10-25-50-100-250 mg/l Al	100 Tests	**1.10015.0001**
Ammonium test	10-30-60-100-200-400 mg/l NH_4	100 Tests	**1.10024.0001**
Arsenic test (highly sensitive)	0,005-0,01-0,025-0,05-0,1-0,25-0,5 mg/l As	100 Tests	**1.17927.0001**
Arsenic test (sensitive)	0,02-0,05-0,1-0,2-0,5/0,1-0,5-1,0-1,7-3 mg/l As	100 Tests	**1.17917.0001**
Ascorbic acid test	50-100-200-300-500-700-1000-2000	100 Tests	**1.10023.0001**
Calcium test	10-25-50-100 mg/l Ca	60 Tests	**1.10083.0001**
Carbonate hardness test	4-8-12-16-24 °d (70 - 430 mg/l $CaCO_3$) (7-43 °f)	100 Tests	**1.10648.0001**
Chloride test	500-1000-1500-2000-3000 mg/l Cl	100 Tests	**1.10079.0001**
Chlorine (free chlorine) test	0,5-1-2-5-10-20 mg/l Cl_2	75 Tests	**1.17925.0001**
Chlorine (free chlorine) test	25-50-100-200-500 mg/l Cl_2	100 Tests	**1.17924.0001**

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Description	Range	Pk	Cat. No.
Chromate test	3-10-30-100 mg/l CrO_4	100 Tests	**1.10012.0001**
Cobalt test	10-30-100-300-1000 mg/l Co	100 Tests	**1.10002.0001**
Copper test	10-30-100-300 mg/l Cu	100 Tests	**1.10003.0001**
Cyanide test	1-3-10-30 mg/l CN	100 Tests	**1.10044.0001**
Formaldehyde test	10-20-40-60-100 mg/l HCHO	100 Tests	**1.10036.0001**
Free fatty acids test	0-0,5-1-2-3 mg/g KOH	1	**1.17046.0001**
Glucose test	10-25-50-100-250-500	50 Tests	**1.17866.0001**
Iron test	3-10-25-50-100-250-500 mg/l Fe(II)	100 Tests	**1.10004.0001**
Lead test	20-40-100-200-500 mg/l Pb	100 Tests	**1.10077.0001**
Manganese test	2-5-20-50-100 mg/l Mn	100 Tests	**1.10080.0001**
Molybdenum test	5-20-50-10-250 mg/l Mo	100 Tests	**1.10049.0001**
Nickel test	10-25-100-250-500 mg/l Ni	100 Tests	**1.10006.0001**
Nitrate test	10-25-50-100-250-500 mg/l NO_3	100 Tests	**1.10020.0001**
Nitrate test	10-25-50-100-250-500 mg/l NO_3	25 Tests	**1.10020.0002**
Nitrite test	0-0,5-1-2-5-10 mg/l NO_2	75 Tests	**1.10057.0001**
Nitrite test	0,1-0,3-0,6-1-2-3 g/l NO_2	100 Tests	**1.10022.0001**
Nitrite test	2-5-10-20-40-80 mg/l NO_2	100 Tests	**1.10007.0001**
Nitrite test	2-5-10-20-40-80 mg/l NO_2	25 Tests	**1.10007.0002**
Peracetic acid test	5-10-20-30-50 mg/l CH_3CO_3H	100 Tests	**1.10084.0001**
Peracetic acid test	500-1000-1500-2000 mg/l CH_3CO_3H	100 Tests	**1.17922.0001**
Peracetic acid test	100-150-200-250-300-400-500 mg/l CH_3CO_3H	100 Tests	**1.10001.0001**
Peroxide test	0,5-2-5-10-25 mg/l H_2O_2	100 Tests	**1.10011.0001**
Peroxide test	0,5-2-5-10-25 mg/l H_2O_2	25 Tests	**1.10011.0002**
Peroxide test	1-3-10-30-100 mg/l H_2O_2	100 Tests	**1.10081.0001**
Peroxide test	100-200-400-600-800-1000 mg/l H_2O_2	100 Tests	**1.10337.0001**
Phosphate test	10-25-50-100-250-500 mg/l PO_4	100 Tests	**1.10428.0001**
Potassium test	250-450-700-1000-1500 mg/l K	100 Tests	**1.17985.0001**
Quaternary ammonium compounds as benzalkonium chloride	10-25-50-100-250-500	100 Tests	**1.17920.0001**
Sulphate test	200-400-800-1200-1600 mg/l SO_4	100 Tests	**1.10019.0001**
Sulphite test	10-40-80-180-400 mg/l SO_3	100 Tests	**1.10013.0001**
Tin test	10-25-50-100-200 mgl Sn	50 Tests	**1.10028.0001**
Total hardness test	3-4-7-14-21 °d (30-210 mg/l CaO) 5-37 °f	100 Tests	**1.10025.0001**
Total hardness test	3-4-7-14-21 °d (30-210 mg/l CaO)5-37 °f	5.000 Tests	**1.10029.0001**
Total hardness test	5-10-15-20-25 °d (50-250 mg/l CaO) 8,9-44,5 °f	100 Tests	**1.10046.0001**
Total hardness test	<1,5; 1,5-2,5; >2,5 mmol/l $CaCO_3$	100 Tests	**1.17934.0001**
Total hardness test (individually wrapped)	3-4-7-14-21 °d (30-210 mg/l CaO)5-37 °f	1.000 Tests	**1.10032.0001**
Total hardness test (individually wrapped)	3-4-7-14-21 °d (30-210 mg/l CaO)5-37 °f	25.000 Tests	**1.10032.0013**
Total hardness test (individually wrapped)	5-10-15-20-25 °d (50-250 mg/l CaO) 8,9-44,5 °f	25.000 Tests	**1.10047.0013**
Zinc test	4-10-20-50 mg/l Zn	100 Tests	**1.17953.0001**

Reflectometer RQflex®10 and RQflex®10 plus

Unique pocket, battery operated reflectometer which uses special strips for the quantitative analysis of various parameters in a wide variety if sample matrices. The RQflex10® plus has the added capability of being able to measure low concentrations of some parameters in mini plastic cells where strips are not sensitive enough.

Designed to be used for analysis in the following industries: Food and drink, agriculture and water. For testing the presence/absence of disinfectants, vitamins as well as cooling lubricants, nitrates and ammonium in clean and dirty water.

- Fast quantitative results: In many cases, after just one minute
- Easy to use, pocket sized, handy and portable: Ideal for carrying out rapid analyses in the field
- Up to five methods can be stored at once using barcode strips on the reflectometer
- Up to 50 measurements can be stored, and displayed and uploaded to a PC at the press of a button (requires RQdata software)

Ordering information: Reflectometer with strip adapter and recalibration set, 4× AAA batteries, complete manual; RQflex® 10 plus also includes a cell adapter and eight empty cells for Reflectoquant® plus cell test kits.

Model	RQflex® 10	RQflex® 10 plus
Area measured	4×6 mm	
Dimensions W×D×H	190×80×20 mm	
Interfaces	PC	
Lamp source	4 LEDs (570/657 nm dual lens)	
Measuring range	4 - 90% relative reflectance	
Photometric resolution/accuracy	0,1/0,5% relative reflectance	
Power supply	4× AAA batteries (for over 1000 measurements)	
Weight (g)	275	
Working temperature	5 - 40 °C	

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Description	Pk	Cat. No.
RQflex® 10 reflectometer for test strips only	1	**1.16970.0001**
RQflex® 10 plus reflectometer for test strips and cuvettes	1	**1.16955.0001**

Description	Pk	Cat. No.
Accessories and spare parts		
RQflex®10 plus empty cuvettes	100	**1.16727.0001**
RQflex®10 plus cell adapter	1	**1.16729.0001**
RQflex®10 strip adapter	1	**1.16953.0001**
Recalibration set** for RQflex®10 and RQflex®10 plus	1	**1.16954.0001**
RQcheck set* for RQflex®10 and RQflex®10 plus	1	**1.16957.0001**
RQdata (software and cable) for transfer of data from reflectometer to PC (Windows® only)	1	**1.16998.0001**

* RQcheck set includes 2 coloured standard strips to check reflectance of the RQflex®10 and RQflex®10 plus
** Recalibration set includes a white strip and barcode to baseline correct the RQflex®10 and RQflex®10 plus

Reflectoquant® tests strips

Strips for use on RQflex 10 and RQflex 10 Plus.

Description	Range	Pk	Cat. No.
Ammonium test	0,2 - 7,0 mg/l NH_4	50 Tests	**1.16892.0001**
Ammonium test	5,0 - 20,0 mg/l NH_4	50 Tests	**1.16899.0001**
Ammonium test	20 - 180 mg/l NH_4	50 Tests	**1.16977.0001**
Ascorbic acid test	25 - 450 mg/l $C_6H_8O_6$	50 Tests	**1.16981.0001**
Blank strip (colour correction)	-	50 Tests	**1.16730.0001**
Calcium test	5 - 125 mg/l Ca	50 Tests	**1.16125.0001**
Calcium test	2,5 - 45,0 mg/l Ca	50 Tests	**1.16993.0001**
Chlorine test (free chlorine)	0,5 - 10,0 mg/l Cl_2	50 Tests	**1.16896.0001**
Formaldehyde test	1,0 - 45,0 mg/l HCHO	50 Tests	**1.16989.0001**
Glucose test	1,0 - 100 mg/l $C_6H_{12}O_6$	50 Tests	**1.16720.0001**
Hydroxymethylfurfural (HMF) test	1,0 - 60,0 mg/l (HMF)	50 Tests	**1.17952.0001**
Iron test	0,5 - 20,0 mg/l Fe(II)	50 Tests	**1.16982.0001**
Iron test	20 - 200 mg/l Fe(II)	50 Tests	**1.16983.0001**
Lactic acid test	3 - 60,0 mg/l $CH_3CHOHCO_2H$	50 Tests	**1.16127.0001**
Magnesium test	5 - 100 mg/l Mg	50 Tests	**1.16124.0001**
Malic acid test	5,0 - 60,0 mg/l $HO_2CCH_2CHOHCO_2H$	50 Tests	**1.16128.0001**
Nitrate test	3 - 90 mg/l NO_3	50 Tests	**1.16995.0001**
Nitrate test	5 - 225 mg/l NO_3	50 Tests	**1.16971.0001**
Nitrite test	0,5 - 25,0 mg/l NO_2	50 Tests	**1.16973.0001**
Nitrite test	30 - 1000 mg/l NO_2	50 Tests	**1.16732.0001**
Peracetic acid test	1,0 - 22,5 mg/l CH_3CO_3H	50 Tests	**1.16975.0001**
Peracetic acid test	20 - 100 mg/l CH_3CO_3H	50 Tests	**1.17956.0001**
Peracetic acid test	75 - 400 mg/l CH_3CO_3H	50 Tests	**1.16976.0001**
Peroxide test	0,2 - 20,0 mg/l H_2O_2	50 Tests	**1.16974.0001**
Peroxide test	100 - 1000 mg/l H_2O_2	50 Tests	**1.16731.0001**
Phosphate test (PMB)	5 - 120 mg/l PO_4	50 Tests	**1.16978.0001**
pH test	pH 1,0 - 5,0	50 Tests	**1.16894.0001**
pH test	pH 4,0 - 9,0	50 Tests	**1.16996.0001**
pH test for cooling lubricants	pH 7,0 - 10,0	50 Tests	**1.16898.0001**
Potassium test	250 - 1200 mg/l K	50 Tests	**1.16992.0001**
Sucrose (saccharose) test	250 - 2500 mg/l	50 Tests	**1.16141.0001**
Sulphite test	10 - 200 mg/l SO_3	50 Tests	**1.16987.0001**
Total hardness test	0,1 - 30,0 °d (1 - 300 mg/l CaO)	50 Tests	**1.16997.0001**
Total sugar test (glucose and fructose)	65 - 650 mg/l	50 Tests	**1.16136.0001**

Reflectoquant®10 plus test kits

Cuvette tests can only be used on RQflex 10 plus reflectometer.

Description	Range	Pk	Cat. No.
Reflectoquant® 10 plus Phosphate test	0,1 - 5,0 mg/l PO_4	100 Tests	**1.17942.0001**
Reflectoquant® 10 plus Potassium test	1,0 - 25,0 mg/l K	100 Tests	**1.17945.0001**

Visual colour kits, MColortest™

MCD

MTC

MCC

Quick tests, visual colour comparison

Test kits for quick, semi-quantitative analysis *in situ,* without the expense of transporting samples to the laboratory. Simple step by step illustrated instructions mean the kits can be used without special chemical training.

The various systems differ in their format, application and sensitivity.

- Results in approximately 1 minute
- Easy to use
- Application-oriented measuring ranges
- Portable
- A range of economical refill packs (RP) are available

Delivery information: Each test kit contains all the necessary reagents, reaction cuvettes, colour comparison chart or comparator wheel and extensive instructions for use.

MColortest™ with colour disc comparator (formerly Microquant®)

Using the comparator disc, these test kits are especially suitable for the analysis of turbid and coloured waters. The comparator disc is a practical and robust colour comparison device that provides reliable measurements, even in humid environments. Ideal for samples of medium to high concentration in applications ranging from testing bottled water to wastewater and other industrial water testing.

MColortest™ titrimetric and colorimetric methods (formerly Aquamerck®)

This range comprises both titrimetric and colorimetric tests for medium concentrations. With its broad range of available test parameters, these quick tests are the method of choice for aquaria, fish farming, aquatic ecology, environmental, cooling and boiler water analysis.

MColortest™ with colour card comparator (formerly Aquaquant®)

By using cuvettes with a long light path, the Aquaquant® test kits are especially suited for measuring low ion concentrations (some as low as 0,005 mg/l). These test kits are especially appropriate for analysing drinking water, spring water, purified and mineral water, as well as cooling and boiler water.

The table below indicates which system of measurement is used for which test see under the column 'Type'.
MCD = MColortest™ comparator disc
MCC = MColortest™ comparator card
MTC = MColortest™ titration and colorimetry

Description	Type	Range	Pk	Cat. No.
Alkalinity test	MTC	0,1-10 mmol/l	200 Tests	**1.11109.0001**
Aluminium test	MCC	0,07-0,12-0,2-0,35-0,5-0,65-0,8 mg/l Al	185 Tests	**1.14413.0001**
Aluminium test	MCD	0,1-0,2-0,35-0,5-0,75-1-2-3-6 mg/l Al	150 Tests	**1.18386.0001**
Ammonium test	MTC	0,2-0,4-0,6-1-2-3-5 mg/l NH_4	50 Tests	**1.08024.0001**
Ammonium test	MTC	0,5-1-3-5-10 mg/l NH_4	150 Tests	**1.11117.0001**
Ammonium test	MCC	0,05-0,1-0,15-0,2-0,3-0,4-0,5-0,6-0,8 mg/l NH_4	100 Tests	**1.14400.0001**
Ammonium test	MCC	0,2-0,5-0,8-1,2-1,6-2-3-5-8 mg/l NH_4	200 Tests	**1.14423.0002**
Ammonium test	MCC	0,025-0,05-0,075-0,1-0,15-0,2-0,25-0,3-0,4 mg/l NH_4	70 Tests	**1.14428.0002**
Ammonium test	MCD	0,2-0,5-0,8-1,3-2,0-3,0-4,5-6-8 mg/l NH_4	200 Tests	**1.14750.0002**
Ammonium test in freshwater and seawater (blister pack)	MTC	0,5-1-2-3-5-10 mg/l NH_4	50 Tests	**1.14657.0001**
Ammonium test RP for 1.14750 and 1.14423	MCD	-	200 Tests	**1.18455.0002**
Calcium test	MTC	2-200 mg/l Ca	170 Tests	**1.11110.0001**
Carbonate hardness test, acid capacity to pH 4,3	MTC	0,36-36 °f; TAC: 0,1-7,2 mmol/l	300 Tests	**1.08048.0001**
Carbonate hardness test, acid capacity to pH 4,3	MTC	1,78-17,8 °f; 1** =1,78 °f =18 mg/l $CaCO_3$	100 Tests	**1.11103.0001**
Carbonate hardness test in freshwater and seawater	MTC	1 ** =1.25 °e =18 mg/l $CaCO_3$	50 Tests	**1.14653.0001**
Chloride test	MTC	2-200 mg/l Cl	200 Tests	**1.11106.0001**
Chloride test	MTC	1 ** =25 mg/l Cl	100 Tests	**1.11132.0001**
Chloride test	MCC	5-10-20-40-75-150-300 mg/l Cl	400 Tests	**1.14401.0001**
Chloride test	MCD	3-6-10-18-30-60-100-180-300 mg/l Cl	200 Tests	**1.14753.0001**

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Description	Type	Range	Pk	Cat. No.
Chloride test, RP for 1.14753.0001; 1.14401.0001	MCD	-	200 Tests	**1.18322.0002**
Chlorine (free chlorine) test	MCC	0,01-0,025-0,045-0,06-0,08-0,1-0,15-0,2-0,3 mg/l Cl_2	400 Tests	**1.14434.0001**
Chlorine and pH	MTC	0,1-0,3-0,6-1,0-1,5 mg/l Cl_2; pH 6,8-7,1-7,4-7,6-7,8	200 Tests	**1.11174.0001**
Chlorine and pH test, RP reagent pH-1 for 1.11174.0001	MTC	-	400 Tests	**1.11143.0001**
Chlorine and pH test, RP reagents for chlorine for 1.11174.0001	MTC	-	200 Tests	**1.11157.0001**
Chlorine dioxide test	MCC	0,020-0,050-0,075-0,10-0,15-0,20-0,30-0,40-0,55 mg/l ClO_2	300 Tests	**1.18754.0001**
Chlorine dioxide test	MCD	0-0,50-0,90-1,4-1,9-3,8-7,5-13-19-28 mg/l ClO_2	100 Tests	**1.18756.0001**
Chlorine dioxide test, RP for 1.18756.0001; 1.18754.0001	MCD	-	300 Tests	**1.18757.0002**
Chlorine test	MTC	0,1-0,2-0,3-0,4-0,5-0,75-1,0-1,5 mg/l Cl_2; pH 6,5-6,8-7,0-7,2-7,4-7,6-7,9	150 Tests	**1.11160.0001**
Chlorine test	MCD	0,25-0,5,-0,75-1-2-4-7-10-15 mg/l Cl_2	400 Tests	**1.14826.0001**
Chlorine test	MCD	0,25-0,5-0,75-1-2- 4-8-10-15 mg/l Cl_2	1.000 Tests	**1.14976.0001**
Chlorine test	MCD	0,1-0,2-0,3-0,4-0,6- 0,8-1,0-1,5-2,0 mg/l Cl_2	560 Tests	**1.14978.0001**
Chlorine test, RP for 1.14826.0001	MCD	-	400 Tests	**1.18326.0002**
Chlorine test, RP for 1.14976.0001; 1.14434.0001	MCD	-	1.000 Tests	**1.14977.0002**
Chlorine test, RP for 1.14978.0001	MCD	-	600 Tests	**1.14979.0002**
Chlorine test, RP reagent Cl_2-1 for 1.11174.0001	MTC	-	2.000 Tests	**1.11113.0001**
Chlorine test, RP Reagent Cl_2-2 for 1.11174.0001	MTC	-	2.000 Tests	**1.11114.0001**
Chlorine test, RP reagent Cl_2-3 for 1.11174.0001	MTC	-	2.000 Tests	**1.11115.0001**
Chlorine test in freshwater and seawater (blister pack)	MTC	0,1-0,25-0,5-1-2 mg/l Cl_2	100 Tests	**1.14670.0001**
Chlorine test with liquid reagent	MDC	0,1-0,2-0,3-0,4-0,6-0,8-1,0-1,5-2,0 mg/l Cl_2	400 Tests	**1.14801.0001**
Chlorine test with liquid reagent, RP for 1.14801.0001	MCD	-	400 Tests	**1.14803.0002**
Chromate test	MCC	0,005-0,01-0,02-0,03-0,04-0,05-0,06-0,08-0,1 mg/l Cr 0,01-0,02-0,04-0,07-0,09-0,11-0,13-0,18-0,22 mg/l CrO_4	150 Tests	**1.14402.0001**
Chromate test	MCC	0,1-0,2-0,3-0,45-0,6-0,8-1,0-1,3-1,6 mg/l Cr 0,2-0,4-0,7-1,0-1,3-1,8-2,2-2,9-3,6 mg/l CrO_4	300 Tests	**1.14441.0001**
Chromate test	MCD	0,1-0,2-0,35-0,6-1,0-1,8-3-6-10 mg/l Cr 0,2-0,4-0,8-1,3-2,2-4,0-6,7-13-22 mg/l CrO_4	300 Tests	**1.14756.0001**
Chromate test, RP for 1.14756.0001; 1.14441.0001; 1.14402.0001	MCD	-	300 Tests	**1.18456.0002**
Colour test	MCC	5-10-20-30-40-50-70-100-150 Hazen	1 SET	**1.14421.0001**
Copper test	MCC	0,05-0,08-0,12-0,16-0,2-0,25-0,3-0,4-0,5 mg/l Cu	125 Tests	**1.14414.0001**
Copper test	MCC	0,3-0,6-1,0-1,5-2,0-2,5-3,0-4,0-5,0 mg/l Cu	125 Tests	**1.14418.0001**
Copper test	MCD	0,3-0,6-1,0-1,5-2-3-5-7-10 mg/l Cu	125 Tests	**1.14765.0001**
Copper test in freshwater and seawater	MTC	0,15-0,3-0,45-0,6-0,8-1,2-1,6 mg/l Cu	50 Tests	**1.14651.0001**
Cyanide test	MCC	0,002-0,004-0,007-0,01-0,013-0,016-0,02-0,025-0,03 mg/l CN	65 Tests	**1.14417.0001**
Cyanide test	MCC	0,03-0,06-0,1-0,15-0,2-0,3-0,4-0,5-0,7 mg/l CN	200 Tests	**1.14429.0001**
Cyanide test	MCD	0,03-0,07-0,13-0,2-0,3-0,5-1-2-5 mg/l CN	200 Tests	**1.14798.0001**
Cyanide test, RP for 1.14798.0001; 1.14429.0001; 1.14417.0001	MCD	-	200 Tests	**1.18457.0002**
Fluoride test	MTC	0-0,15-0,3-0,5-0,8 mg/l F	100 Tests	**1.18771.0001**
Formaldehyde test	MTC	0,1-0,25-0,4-0,6-0,8-1,0-1,5 mg/l HCHO	100 Tests	**1.08028.0001**
Hydrazine test also required colour matching vessel 1.08018.0001	MTC	0,1-0,25-0,5-1,0 mg/l N_2H_4	100 Tests	**1.08017.0001**
Iron test	MTC	0,1-0,3-0,5-1,0-2,5-5,0-7,5-12,5-25-50 mg/l Fe	200 Tests	**1.11136.0001**
Iron test	MCC	0,01-0,02-0,03-0,04-0,06-0,08-0,1-0,15-0,2 mg/l Fe	300 Tests	**1.14403.0001**
Iron test	MCC	0,25-0,5-1-2-3-5-7,5-10-15 mg/l Fe	300 Tests	**1.14404.0001**
Iron test	MCC	0,2-0,4-0,6-0,8-1,0-1,3-1,6-2,0-2,5 mg/l Fe	500 Tests	**1.14438.0001**
Iron test	MCD	0,1-0,2-0,3-0,5-0,8-1,2-2-3-5 mg/l Fe	500 Tests	**1.14759.0001**
Iron test, RP for 1.11136.0001	MTC	-	200 Tests	**1.08023.0001**
Iron test, RP for 1.14759.0001; 1.14438.0001; 1.14403.0001	MCD	-	500 Tests	**1.18458.0002**
Iron test in freshwater and seawater (blister pack)	MTC	0,05-0,1-0,2-0,4-0,6-0,8-1 mg/l Fe	50 Tests	**1.14660.0001**
Magnesium test	MTC	100-200-300-500-1000-1500 mg/l Mg	50 Tests	**1.11131.0001**
Manganese test	MCC	0,03-0,06-0,1-0,15-0,2-0,25-0,3-0,4-0,5 mg/l Mn	120 Tests	**1.14406.0001**
Manganese test	MCD	0,3-0,7-1,3-2-3-4-5-7-10 mg/l Mn	120 Tests	**1.14768.0001**
Manganese test, RP for 1.14768.0001; 1.14406.0001	MCD	-	120 Tests	**1.18460.0002**
Nickel test	MCC	0,02-0,04-0,07-0,1-0,15-0,2-0,3-0,4-0,5 mg/l Ni	125 Tests	**1.14420.0001**
Nickel test	MCD	0,5-1-1,5-2-3-4-6-8-10 mg/l Ni	500 Tests	**1.14783.0001**
Nickel test, RP for 1.14783.0001; 1.14420.0001	MCD	-	500 Tests	**1.18461.0002**

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Description	Type	Range	Pk	Cat. No.
Nitrate test	MTC	10-25-50-75-100-125-150 mg/l NO_3	200 Tests	**1.11170.0001**
Nitrate test	MCD	5-10-20-30-40-50-60-70-80-90 mg/l NO_3	90 Tests	**1.18387.0001**
Nitrate test in freshwater	MTC	10-25-50-75-100-125-150 mg/l NO_3	100 Tests	**1.11169.0001**
Nitrite test	MTC	0,025-0,05-0,075-0,1-0,15-0,2-0,3-0,5 mg/l NO_2	200 Tests	**1.08025.0001**
Nitrite test	MCC	0,005-0,012-0,02-0,03-0,04-0,05-0,06-0,08-0,1 mg/l NO_2	110 Tests	**1.14408.0001**
Nitrite test	MCC	0,1-0,2-0,3-0,4-0,6-0,8-1,0-1,3-2,0 mg/l NO_2	400 Tests	**1.14424.0001**
Nitrite test	MCD	0,1-0,2,0,4-0,6-1,0-1,8-3-6-10 mg/l NO_2	400 Tests	**1.14774.0001**
Nitrite test, RP for 1.14774.0001; 1.14424.0001; 1.14408.0001	MCD	-	400 Tests	**1.18463.0002**
Nitrite test in freshwater and seawater (blister pack)	MTC	0,05-0,15-0,25-0,5-1,0 mg/l NO_2	100 Tests	**1.14658.0001**
Oxygen Test	MTC	0,1-10 mg/l O_2	100 Tests	**1.11107.0001**
Oxygen test, RP for 1.11107.0001	MTC	-	100 Tests	**1.11152.0001**
Oxygen test in freshwater and seawater (also required 1.14663)	MTC	1-3-5-7-9-12 mg/l O_2	50 Tests	**1.14662.0001**
Ozone test	MCC	0,00-0,007-0,017-0,030-0,040-0,055-0,070-0,10-0,14-0,20 mg/l O_3	300 Tests	**1.18755.0001**
Ozone Test	MCD	0-0,15-0,35-0,50-0,70-1,4-2,7-5,0-7,0-10 mg/l O_3	300 Tests	**1.18758.0001**
Ozone test, RP for 1.18758.0001; 1.18755.0001	MCD	-	300 Tests	**1.18759.0002**
pH indicator liquid	MTC	pH 9-10-11-12-13	100 ml	**1.09176.0100**
pH indicator liquid	MTC	pH 0-0,5-1-1,5-2-2,5-3-3,5-4-4,5-5-5,5	100 ml	**1.09177.0100**
Phosphate test	MCC	1,0-2,0-3,5-6,0-10-20-40 mg/l PO_4-P 3,1-6,1-10,7-18,4-30,7-61,3-123 mg/l PO_4	190 Tests	**1.14449.0001**
Phosphate test	MCD	0,2-0,4-0,6-0,8-1-1,5-2-2,5-3 mg/l PO_4-P; 0,6-1,2-1,8-2,5-3,1-4,6-6,1-7,7-9,2 mg/l PO_4	200 Tests	**1.14846.0001**
Phosphate test	MCD	4,6-9,2-18-28-37-49-61-123-307 mg/l PO_4	300 Tests	**1.18388.0001**
Phosphate Test	MTC	1,3-3,3-6,7-10-13 PO_4 1,0-2,5-5,0-7,5-10 mg/l P_2O_5	200 Tests	**1.11138.0001**
Phosphate Test	MCC	0,015-0,03-0,045-0,06-0,08-0,11-0,14 mg/l PO_4-P; 0,046-0,092-0,14-0,18-0,25-0,34-0,43 mg/l PO_4	200 Tests	**1.18394.0001**
Phosphate test, RP for 1.11138.0001	MTC	-	200 Tests	**1.08046.0001**
Phosphate test, RP for 1.14846.0001; 1.14445.0001	MCD	-	200 Tests	**1.18465.0002**
Phosphate test in freshwater and seawater (blister pack)	MTC	0,25-0,5-0,75-1,0-1,5-2-3 mg/l PO_4	100 Tests	**1.14661.0001**
pH test	MTC	pH 4,5-5-5,5-6-6,5-7-7,5-8-8,5-9	400 Tests	**1.08027.0001**
pH test	MCC	pH 4,5-5-5,5-6-6,5-7-7,5-8-8,5-9	100 Tests	**1.08038.0001**
pH test, RP for 1.08038.0001	MTC	-	400 Tests	**1.08043.0001**
pH test (phenol red solution)	MTC	pH 6,8-8,2	1.000 Tests	**1.11116.0001**
pH Test in freshwater and seawater	MTC	5,0-5,3-5,6-6,0-6,3-6,6-7,0-7,3-7,6-8,0-8,3-8,6-9,0	200 Tests	**1.18773.0001**
pH test in the swimming pool (blister pack)	MTC	pH 6,5-6,8-7,1-7,4-7,6-7,8-8,2	200 Tests	**1.14669.0001**
pH universal indicator, liquid	MTC	pH 4-4,5-5-5,5-6-6,5-7-7,5-8-8,5-9-9,5-10	100 ml	**1.09175.0100**
pH universal indicator, liquid	MTC	pH 4-4,5-5-5,5-6-6,5-7-7,5-8-8,5-9-9,5-10	1 l	**1.09175.1000**
Residual hardness test	MTC	0,05-0,10-0,19 °e (0,7-1,4-2,7mg/l $CaCO_3$) 0,07-0,14-0,27°f	400 Tests	**1.11142.0001**
Silicate (silicic acid) test	MCC	0,01-0,02-0,04-0,06-0,08-0,1-0,15-0,2-0,25 mg/l Si; 0,02-0,04-0,09-0,13-0,17-0,21-0,32-0,43-0,53 mg/l SiO_2	150 Tests	**1.14410.0001**
Silicate (silicic acid) test	MCD	0,6-1,3-2,1-3,2-4,3-6,4-11-15-21 mg/l SiO_2	150 Tests	**1.14792.0001**
Silicate test, RP for 1.14792.0001; 1.14410.0001	MCD	-	150 Tests	**1.18323.0002**
Sulphate test	MCC	25-50-80-110-140-200-300 mg/l SO_4	90 Tests	**1.14411.0001**
Sulphide test	MCC	0,02-0,04-0,06-0,08-0,1-0,13-0,16-0,2-0,25 mg/l S	100 Tests	**1.14416.0001**
Sulphide test	MCD	0,1-0,3-0,5-0,7-1-2-3-4-5 mg/l S	200 Tests	**1.14777.0001**
Sulphide test, RP for 1.14777.0001; 1.14416.0001	MCD/MCC	-	200 Tests	**1.18468.0002**
Sulphite test	MTC	0,5 - 50 mg/l Na_2SO_3; 0,3-32 mg/l SO_3	200 Tests	**1.11148.0001**
Total hardness test	MTC	0,36 - 36 °f; 10 - 360 mg/l $CaCO_3$	300 Tests	**1.08039.0001**
Total hardness test	MTC	0,18 - 10 °f; (1 - 100 mg/l $CaCO_3$)	300 Tests	**1.08047.0001**
Total hardness test	MTC	1 **=20 mg/l $CaCO_3$	200 Tests	**1.08312.0001**
Total hardness test	MTC	1,78 -17,8 °f; 1**=7,1mg/l Ca	100 Tests	**1.11104.0001**
Total hardness test, RP for 1.08039.0001	MTC	-	300 Tests	**1.08033.0001**
Total hardness test, RP for 1.08047.0001	MTC	-	300 Tests	**1.08040.0001**
Total hardness test, RP indicator solution H-1 for 1.08039.0001	MTC	-	600 Tests	**1.11122.0001**
Total hardness test, RP titration solution reagent H-2 for 1.08039.0001	MTC	-	600 Tests	**1.08203.0001**
Total hardness test in freshwater (blister pack)	MTC	1 **=18 mg/l $CaCO_3$	50 Tests	**1.14652.0001**
Urea test for swimming pools, RP for 1.14843.0001***	MCD	-	100 Tests	**1.14845.0002**
Urea test for swimming pools (also required 1.16493.0010)***	MCD	0,3-0,6-1,0-1,5-2-3-4-5-8 mg/l $(NH_2)_2CO$	100 Tests	**1.14843.0001**

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Description	Type	Range	Pk	Cat. No.
Zinc test	MCC	0,1-0,2-0,3-0,4-0,5-0,7-1,0-2,0-5,0 mg/l Zn	120 Tests	**1.14412.0001**
Zinc test	MCD	0,1-0,2-0,3-0,4-0,5-0,7-1-2-5 mg/l Zn	120 Tests	**1.14780.0001**
Zinc test, RP for 1.14780.0001	MCD	-	120 Tests	**1.14782.0002**

Description	Type	Pk	Cat. No.
Accessories for MColortest™			
Colour matching vessel hydrazine for 1.08017.0001 (MTC)	MTC	1	**1.08018.0001**
Oxygen reaction tube for 1.14662.0001 (MTC)	MTC	1	**1.14663.0001**
Flat bottom tubes for MCC	MCC	12	**1.14901.0001**
Flat bottom tubes for MTC	MTC	12	**1.14902.0001**

** = 1 drop *** Urease (from jack beans), Cat. No. 1.16493.0010 is also required for the Urea test kits
RP= Refill pack

Compact Laboratory, MColortest™

Merck has identified a range of applications where a particular combination of tests is required for field use. The Compact Laboratory range meets these requirements with a sturdy portable plastic case, which can be used as a work surface, packed with all the kits, equipment and reagents needed for the evaluation.

- Compact
- Ideal for schools and universities
- All your requirements, both kits and equipment packed in a portable case

Ordering information: Refill packs are available for all parameters (please see instruction booklet with kit for part numbers).

Delivery information: Supplied with step by step operating instructions and guides.

Test	Range	Water testing 1.11151.0001	Aquarist 1.11102.0001	Agroquant® soil testing 1.14602.0001
		Tests per kit	Tests per kit	Tests per kit
Ammonium	10 - 400 mg/l			100
Ammonium	0.5 - 10 mg/l		50	50
Ammonium	0.2 - 5 mg/l	50		
Carbonate hardness	0.2 - 20 ° d	300		
Carbonate hardness	Graduation 1° d		50	
Nitrate	10 - 500 mg/l			100
Nitrate	10 - 150 mg/l	200	100	
Nitrite	0.025 - 0.5 mg/l	200		
Nitrite	0.05 - 1 mg/l		100	
Oxygen	0.1 - 10 mg/l	100		
pH	4,5 - 9	400		
pH	2 - 9			100
pH	5 - 9		200	
Phosphate	0.25 - 3 mg/l	100		
Total hardness	0,2 - 20° d	300		
Total hardness	Graduation 1° d		100	

Description	Pk	Cat. No.
MColortest™ Compact Laboratory for water testing	1 SET	**1.11151.0001**
Compact Soil Laboratory, Agroquant® for soil testing	1 Set	**1.14602.0001**
MColortest™ Compact Laboratory for aquarists	1 SET	**1.11102.0001**
Accessories		
Areometer (spare) for Compact Laboratory for 1.11154	1	**1.11165.0001**

Comparators, Lovibond® Comparator System 2000+
Tintometer

The Comparator System 2000+ is a precise and general purpose colorimetric system for water testing. It is a high quality instrument for visually matching the intensity of the colour of the sample with Lovibond glass filters. It includes an adjustable cell compartment for samples in cells of up to 40 mm in path length. Nessleriser 2150 and the 2250 are longer path length instruments for matching a column of a sample in a Nessler cylinder with Lovibond glass filters. They are designed for measuring concentrations that are below the sensitivity of the Comparator 2000+.

- The integrated prism presents the glass standard discs and the coloured sample in the same field of vision, which allows for discrimination and matching of colours
- The prism is ultrasonically sealed to prevent contamination of the optics
- Each test disc is equipped with glass filters which guarantee a stability of colour, which do not fade and which can be changed easily without having to open the apparatus
- Allows for the compensation of water samples that are turbid or tinted
- Each comparator is available as a natural daylight option or can be used with the standardised Daylight 2000 lighting unit or a portable lighting unit

Description	Pk	Cat. No.
Comparator 2000+	1	**705-0335**
Nessleriser 2150 with stand	1	**705-0343**
Nessleriser 2250 with stand	1	**705-0344**
Nessleriser 2250 with stand, Daylight 2000 lighting unit and pair of Nessler tubes, 250 mm with plungers	1	**705-0342**

Description	Pk	Cat. No.
Cells and accessories for Lovibond® Comparator 2000+		
Cell stand to hold 10 x DB424 cells	1	**705-0337**
DB424/S Glass cells square 13.5 mm path length with lid	5	**634-8590**
W680/2.5 mm path length, fused optical glass rectangular cell	1	**705-0404**
W680/5 mm path length, fused optical glass rectangular cell	1	**705-0401**
W680/25 mm path length, fused optical glass rectangular cell	1	**705-0403**
W680/40 mm path length, fused optical glass rectangular cell	1	**705-0566**
Stand for 12 Nessler tubes AF306/P	1	**705-0338**
AF260, Stoppered extraction tube calibrated at 2,5; 5; 10; 15; 17,5 ml for amine disc 3/58	1	**705-0345**
AF306/P Pair of Nessler tubes, 50 ml/113 mm with plungers	2	**705-0346**
DB420 Pair of Nessler tubes, 250 mm with plungers	2	**705-0347**
W680/10 mm path length, fused optical glass rectangular cell	1	**705-0402**

Discs for Comparators, Lovibond® Comparator System 2000+
Tintometer

A wide range of test discs containing a series of graded glass filters, which have been pre-calibrated to give direct test readings. The unique feature of Lovibond® test discs is that they incorporate coloured glass filters which are colour stable and not affected by UV light or extreme environmental conditions.

- Disc codes starting with 'N' are for use with the Nessleriser 2150
- Disc codes starting with 'C' are for use with the Nessleriser 2250
- All other discs are for use with the Comparator 2000+

Ordering information: The most widely used discs are listed below but others are available on request. For details of reagents and accessories required for particular discs please see the Technical Tables of the Technical Services section of the UK VWR website: www.uk.vwr.com

Test method	Code	Range	Pk	Cat. No.
Aluminium	3/127A	0 - 0,5	1	**633-0171**
Amines	3/58	1 - 10	1	**705-0567**
Ammonia	3/112	0 - 0,4 NH_4	1	**633-0167**
Ammonia	3/113	0 - 1,0 N	1	**633-0168**
Ammonia	3/125	0 - 10 N	1	**633-0169**
Ammonia	3/166	2 - 20 N	1	**633-0174**
Ammonia	NAA	1 - 10 µg/l NH_3	1	**633-0188**
Ammonia	NAB	10 - 26 µg/l NH_3	1	**633-0189**
Ammonia	NAC	28 - 60 µg/l NH_3	1	**633-0190**
Ammonia	NAD	60 - 100 µg/l NH_3	1	**633-0191**
Bromine	3/53A	0,2 - 2,0	1	**633-0185**
Bromine	3/53B	1 - 10	1	**633-0186**
Chlorine	3/2ARP	5,0 - 50	1	**633-0175**
Chlorine	3/2IOD	5,0 - 250	1	**633-0176**
Chlorine	3/40P	2,0 - 5,0	1	**633-0177**
Chlorine	3/40K	0,5 - 6,0	1	**633-0178**

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Test method	Code	Range	Pk	Cat. No.
Chlorine	3/40A	0,1 - 1,0	1	633-0179
Chlorine	3/40B	0,2 - 4,0	1	633-0180
Chlorine	3/40E	0,02 - 0,3	1	633-0181
Chlorine	3/40HN	2,0 - 10	1	633-0182
Chlorine	3/40S	1,0 - 4,0	1	633-0183
Chlorine	3/40J	0,1 - 2,0	1	633-0184
Chlorine	NDP	0,05 - 0,5	1	633-0192
Chlorine	NDPC	0,02 - 0,2	1	633-0194
Chlorine	NDPD	0,1 - 1,0	1	633-0195
Chlorine	CBA	2 - 30 µg/l	1	633-0196
Chlorine dioxide	3/157	0,25 - 5,0	1	633-0173
Chlorine dioxide	3/40ED	0,04 - 0,57	1	633-0201
Chromium	3/59	10 - 100 µg/l	1	633-0187
Colour (hazen/APHA)	NSB	70 - 250 Pt	1	633-0197
Colour (hazen/APHA)	CAA	0 - 30 Pt	1	633-0198
Colour (hazen/APHA)	CAB	30 - 70 Pt	1	633-0199
Colour (hazen/APHA)	NSH	10 - 90 Pt	1	633-0200
Copper	3/110	0 - 4,0	1	633-0165
Copper	3/106	0 - 1,0	1	633-0166
Dissolved oxygen	NOE	0 - 0,12	1	705-0642
Hydrazine	3/126	0 - 0,5	1	633-0170
Hydrazine	3/135	0,02 - 0,2	1	633-0172
Hydrazine	3/85	0 - 1,0	1	705-0668
Iron	3/116	0,1 - 1,0	1	705-0621
Iron	3/117	1,0 - 10,0	1	705-0622
Iron	NOL	0,01 - 0,10	1	705-0643
Molybdate	3/137	5 - 50	1	705-0627
Molybdate	3/138	10 - 150	1	705-0628
Nitrate	3/124	0,1 - 1,0	1	705-0623
Nitrate	3/142	10 - 100	1	705-0630
Nitrite	3/103	0,05 - 0,5	1	705-0620
Nitrite	NJ	0,05 - 1,0 µg/l	1	705-0640
Nitrite	NJP	0,002 - 0,5	1	705-0644
Oxygen dissolved	3/165	2 - 12	1	705-0634
Ozone	3/148	0 - 0,50	1	705-0632
Ozone	3/67	0,1 - 1,0	1	705-0638
pH	2/1A	1,2 - 2,8 pH	1	705-0612
pH	2/1C	3,6 - 5,2 pH	1	705-0613
pH	2/1E	4,4 - 6,0 pH	1	705-0614
pH	2/1G	5,2 - 6,8 pH	1	705-0615
pH	2/1H	6,0 - 7,6 pH	1	705-0648
pH	2/1J	6,8 - 8,4 pH	1	705-0616
pH	2/1K	7,2 - 8,8 pH	1	705-0617
pH	2/1L	8,0 - 9,6 pH	1	705-0618
Phosphate	3/133	0 - 4,0	1	705-0625
Phosphate	3/136	0 - 40	1	705-0626
Phosphate	3/60	10 - 100	1	705-0637
Phosphate	3/70	0 - 100	1	705-0639
Silica	3/139	0,4 - 4,0	1	705-0629
Silica	3/147	1 - 10	1	705-0631
Silica	3/13	2,5 - 25	1	705-0635
Silica	NN	1 - 20	1	705-0641
Sugar in water	3/29A	0 - 100	1	705-0636
Sulphide	3/128	0 - 0,50	1	705-0624
Zinc	3/102	0 - 4,0	1	705-0619
Zinc	3/151	0 - 1,0	1	705-0633

ALL YOU NEED FOR CHEMICAL ANALYSIS

A great companion for chemists in any industry

- Sampling and sample preparation
- Spectroscopy, chromatography and physical measurement
- Waste and hazard management

Request your copy from your local VWR sales office or vwr.com

Comparator kits, multiparameter for water testing, Comparator 2000+
Lovibond

Lovibond® Comparator system 2000+ is an extremely versatile, modular system for testing water. The battery operated portable lighting unit can be integrated to give standardised lighting conditions to enhance reproducibility.

- Compact and portable
- Simple to use yet uncompromising in terms of precision and reproducibility of results

Delivery information: Comparator test kits are supplied as a complete system in a sturdy plastic case. Together with the Comparator 2000+ and test discs, each kit includes all the necessary cells, accessories and Lovibond® tablet reagents (for 100 measurements). The AF368 is not supplied with reagents.

Description	Type	Range	Pk	Cat. No.
Raw water	AF 355	Alkalinity: 0 - 500 mg/l $CaCO_3$ Ammonia: 0 - 1 mg/l N Chloride: 0 - 5000 mg/l Cl Hardness: 0 - 500 mg/l $CaCO_3$ Hazen Colour: 10 - 90 mg Pt/l pH value: 6 - 8,4	1 KIT	**705-0361**
Heavy metals	AF 368	Chromium: 10 - 100 µg Cr Copper: 2,5 - 50 µg Cu Cyanide: 0,05 - 1 mg/l CN Nickel: 1 - 10 mg/l Ni Zinc: 0 - 50 µg Zn	1 KIT	**705-0788**
Drinking water	AF 357	Chloride: 0 - 5000 mg/l Cl Chlorine: 0,02 - 0,3 mg/l Cl_2 Chlorine: 0,2 - 4 mg/l Cl_2 Fluoride: 0 - 1,6 mg/l F Hardness: 0 - 500 mg/l $CaCO_3$ Hazen colour: 10 - 90 mg Pt/l pH value: 6 - 8,4	1 KIT	**705-0787**
Sewage and domestic effluent	AF 358	Ammonia: 0 - 1 mg/l Nl Chlorine: 0,1 - 1 mg/l Cl_2 Chlorine: 1 - 10 mg/l Cl_2 Nitrite: 0,05 - 0,5 mg/l N Permanganate (BOD): 0 - 60 mg/l pH value: 4 - 8; 8 - 9,6 Sulphide: 0 - 0,5 mg/l S	1 KIT	**705-0362**

Comparator lighting units

Daylight 2000

Daylight Unit, Nessleriser

TK 102

For consistent and accurate readings when using Lovibond comparator instruments, it is important to use a constant light source for matching the sample with the glasses.

Standardised lighting unit, Daylight 2000

This mains operated bench top unit is corrected to a good Northern daylight using a tungsten halogen lamp and a calibrated colour temperature correction filter. It guarantees uniform lighting conditions for colour matching, allowing consistent and accurate readings when using Lovibond test discs.

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Portable lighting units

The portable lighting unit is a constant light source powered by standard batteries for colour matching in any location.

Description	Pk	Cat. No.
Portable lighting unit, TK 102	1	**705-0336**
Daylight 2000, lighting source for Comparator 2000+, mains operated	1	**705-0681**
Daylight 2000 Unit for Nessleriser, mains operated	1	**705-0682**

Nessleriser systems, Lovibond® comparators with Pt-Co/hazen/APHA scale

Tintometer

For colour grading of clear, light yellow liquids such as clear oils, chemicals, petrochemicals and water. In particular, the Nessleriser 1209 is designed for companies wishing to comply with ASTM D 1209, which specifies a Nessleriser system for colour comparison using 100 ml tubes, with the 100 ml graduation mark 275 to 295 mm above the bottom of the tube

Each system covers a set measuring range and includes:

- A visual comparator instrument with a long path length, ensuring good sensitivity and accuracy when grading pale coloured samples
- A selection of Pt-Co/APHA colour standards - stable-coloured glass filters in test discs, which have been precalibrated to give direct Pt-Co Colour readings over set measuring ranges
- A standardised bench-top light source to ensure constant and uniform lighting conditions for colour matching and therefore consistent and accurate readings
- Nessler cylinders of the appropriate path length

Type	Description	Range	For	Pk	Cat. No.
AF327	Nessleriser 1209 with the Daylight 2000 lighting unit and 100 ml (288 mm) Nessler cylinders, Pt-Co discs 1209/1(0 - 30 mg Pt/l), 1209/2 (30 - 70 mg Pt/l), deionised water	0 - 70 mg Pt/l	Pt-Co/Hazen/APHA colour, low range, according to ASTM D1209	1	**633-0149**
AF329	Nessleriser 2150 with Daylight 2000 Lighting Unit and 113 mm (50 ml) Nessler cylinders, Nessleriser 2250 upgrade with 250 mm Nessler cylinders, Pt-Co discs CAA (0 - 30 mg Pt/l), CAB (30 - 70 mg Pt/l), NSB (70 - 250 mg Pt/l), stand for using Nessleriser with natural lighting	0 - 250 mg Pt/l	Pt-Co/Hazen/APHA colour	1	**633-0150**

Nessler cylinders for Lovibond Comparators

Cylinders in colourless glass with a polished base, supplied in pairs.

Conform to BS612.

Description	Pk	Cat. No.
Nessler cylinder, one mark at 50 ml	2	**705-0324**
Nessler cylinder, two marks at 50 and 100 ml	2	**705-0325**

VWR PROLABO CHEMICALS

Powder Pillows, reagents for Hach® instruments

VWR Powder Pillow reagents are designed to be used on all the laboratory and portable Hach® instruments. No calibration data is necessary; they can be used with the Hach® instrument calibrations, handling is identical to the corresponding Hach® reagents. The pillows, individually sealed in aluminium foil packs, are unaffected by ambient conditions and contain pre-measured powder reagents for accuracy, convenience and great solubility.

- Accurate
- Fast and convenient - easier dissolution than tablets and long shelf life
- No calibration necessary
- Identical handling to the corresponding Hach® reagents

Description	Range	Pk	Cat. No.
Aluminium, RS 10 ml	0 - 0,22 mg/l Al	100 Tests	**85600.620**
Ammonia, RS 10 ml	0 - 0,5 mg/l NH_3-	200 Tests	**85617.620**
Ammonia, TUBES HR	0 - 50 mg/l NH_3-	50 Tests	**85616.610**
Ammonia, TUBES LR	0 - 2,50 mg/l NH_3-	50 Tests	**85615.610**

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Description	Range	Pk	Cat. No.
Chlorine-free (DPD), PP 10 ml	0,01 - 2 mg/l Cl_2	100 Tests	**85601.620**
Chlorine-free (DPD), PP 10 ml	0,01 - 2 mg/l Cl_2	1.000 Tests	**85601.680**
Chlorine-free (DPD), PP 25 ml	0 - 5,00 mg/l Cl_2	100 Tests	**85602.620**
Chlorine-free (DPD), PP 25 ml	0 - 5,00 mg/l Cl_2	1.000 Tests	**85602.680**
Chlorine total (DPD), PP 10 ml	0,01 - 2 mg/l Cl_2	100 Tests	**85603.620**
Chlorine total (DPD), PP 10 ml	0,01 - 2 mg/l Cl_2	1.000 Tests	**85603.680**
Chlorine total (DPD), PP 25 ml	0 - 5,00 mg/l Cl_2	100 Tests	**85604.620**
Chlorine total (DPD), PP 25 ml	0 - 5,00 mg/l Cl_2	1.000 Tests	**85604.680**
Copper, PP 10 ml	0 - 5,00 mg/l Cu	100 Tests	**85605.620**
Copper, PP 10 ml	0 - 5,00 mg/l Cu	1.000 Tests	**85605.680**
DEHA, RS	20 - 500 µg/l DEHA	100 Tests	**85620.620**
Iron, PP 10 ml	0 - 3 mg/l Fe	100 Tests	**85607.620**
Iron, PP 10 ml	0 - 3 mg/l Fe	1.000 Tests	**85607.680**
Iron, TPTZ, PP 10 ml	0 - 1,8 mg/l Fe	100 Tests	**85606.620**
Manganese, RS 10 ml HR	0 - 20 mg/l Mn	100 Tests	**85609.620**
Manganese, RS 10 ml LR	0 - 0,7 mg/l Mn	100 Tests	**85608.620**
Molybdenum (DPD), PP 10 ml	0 - 35 mg/l Mo	100 Tests	**85610.620**
Molybdenum (DPD), PP 25 ml	0 - 35 mg/l Mo	100 Tests	**85611.620**
Nitrate TUBES, RS	0,2 - 30 mg/l NO_3-	50 Tests	**85612.620**
Nitrite, PP 10 ml	0 - 0,3 mg/l NO_2-	100 Tests	**85614.620**
Nitrite, PP 25 ml	0 - 0,3 mg/l NO_2-	100 Tests	**85613.620**
Nitrite, PP 25 ml	0 - 0,3 mg/l NO_2-	1.000 Tests	**85613.680**
Nitrogen, RS	0 - 25 mg/l N	50 Tests	**85618.610**
Nitrogen, RS	10 - 150 mg/l N	50 Tests	**85619.610**
Phosphate (DPD), PP 10 ml	0 - 2,5 mg/l PO_4	100 Tests	**85621.610**
Phosphate (DPD), PP 10 ml	0 - 2,5 mg/l PO_4	1.000 Tests	**85621.680**
Phosphate reactive, RS	0,06 - 5 mg/l PO_4	50 Tests	**85622.610**
Phosphate total, RS	0,06 - 3,5 mg/l PO_4-P 0,02 - 1,1 mg/l P	50 Tests	**85623.610**
Phosphate total / acid hydrolysable, RS	0,06 - 3,5 mg/l PO_4	50 Tests	**85624.610**
Silica, RS 10 ml HR	0 - 100 mg/l SiO_2	100 Tests	**85626.620**
Silica, RS 10 ml LR	0 - 1,6 mg/l SiO_2	100 Tests	**85625.620**
Silica, RS 25 ml HR	0 - 200 mg/l SiO_2	100 Tests	**85627.620**
Sulphate, PP 10 ml	1 - 70 mg/l SO_4	100 Tests	**85629.620**
Sulphate, PP 25 ml	0 - 70 mg/l SO_4	100 Tests	**85628.620**
Sulphate, PP 25 ml	0 - 70 mg/l SO_4	1.000 Tests	**85628.680**

RS = Powder Pillow reagent set
PP = Powder Pillow
DEHA = N,N-Diethylhydroxylamine

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Thermoreactors, Spectroquant® TR series

Reliability, speed, precision and future compatibility with the extensive range Spectroquant® kits are the unmistakable hallmarks of thermoreactors from Merck, combined with the simplest possible operation and highest user safety.

In combination with the Spectroquant® test cells and digestion reagents, this is a fully integrated system.

- Thermoreactor with integrated safety cover
- Liquid crystal display for temperature and time
- Seven fixed temperature-time programs that automatically switch off at the end of the heating time
- Temperature settings: 148 °C, 120 °C, 100 °C; the TR620 has two heating zones that can be set and controlled independently
- All thermoreactors are suitable for the determination of COD and TOC and the total levels of lead, cadmium, chromium, cyanide iron, copper, nickel, phophorus, silver, nitrogen and zinc

Model	TR320	TR420	TR620
Heating zones	1		2 separate temperature selectable zones
Options	-	Thermosensor: Heating block integrated monitoring	
RS232 connection		√	
Selectable programs	7 programs: 148 °C (20 min or 120 min), 150 °C (120 min), 120 °C (30 min, 60 min or 120 min), 100 °C (60 min)	7 pre-set programs as per TR320 plus 8 user-defined programs	
Temperature setting (°C)	3 fixed temperatures 100, 120 and 148 ±1	Up to 170 ±1	
Time	As per 7 programs	0 - 180 minutes, selectable	0 - 180 minutes selectable

Type	Tube Ø (mm)	No. of holes	Blocks	Weight (kg)	Pk	Cat. No.
TR320	16	12	1	2,85	1	**1.71200.0001**
TR420	16	24	2	3,6	1	**1.71201.0001**
TR620	16	24 (2×12)	2	3,6	1	**1.71202.0001**

Description	Pk	Cat. No.
Accessories		
Thermosensor for TR420 and TR620	1	**1.71203.0001**
PC cable for TR420 and TR620	1	**1.71204.0001**

Crack Sets for sample preparation

Complete Sets for digestion in a thermoreactor. The subsequent determination can be carried out in Spectroquant® test cells or reagent test sets. Crack Sets are easy to use and make sample preparation straightforward. For the preparation of dirty, coloured or samples with high levels of suspended material prior to using the appropriate Spectroquant® kit.

- Contains all reagents required for selected tests
- Easy to use - with step by step instructions

Model	Crack Set 10	Crack Set 10C	Crack Set 20
Contents	Digestion reagent, acid, neutralising agent for pH adjustment.	Digestion reagent in round cells, acid, neutralising agent for pH adjustment.	Digestion reagent, base.
Digestion/dissolution	Pb, Cd, Cr, Fe, Cu, Ni, Zn and P(total)		Total nitrogen
No. of digestions	100	25	90

Description	Pk	Cat. No.
Crack Set 10 Spectroquant®	100 Tests	**1.14687.0001**
Crack Set 10C Spectroquant®	25 Tests	**1.14688.0001**
Crack Set 20 Spectroquant®	90 Tests	**1.14963.0001**

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Colorimeter, Spectroquant® Picco

The Spectroquant® Picco is a range of small handheld colorimeters for water analysis

Monoparametric and multiparametric instruments suitable for drinking water, wastewater and swimming pool analysis. They use the well known chemistry of the Spectroquant® test (cell tests and reagent tests).

- Easy to use
- Portable and compact
- Pre-programmed dedicated methods
- Choice between easy to handle cell tests or inexpensive reagent tests

Delivery information: Picco colorimeter, case, adapter for cell tests (16 mm), 3× 16 mm round cells (not in the COD or Cl_2/pH/O_3 colorimeters), 3× 24 mm cells for reagent tests in the chlorine colorimeters only and 9 V battery.

Model	Picco
Optics	Temperature compensated LED and photosensor amplifier
Ambient operating temperature (°C)	0...40
Sample compartment	Waterproof
Housing	ABS
Keypad	3 key polycarbonate membrane, splash-proof
Automatic switch-off	√
Humidity range (% RH)	30 - 90
Power supply	9 V battery, providing 40 h of operation (equivalent to ~600 measurement cycles of 4 minutes)
W×D×H carrying case (mm)	270×225×80
W×D×H (mm)	190×110×55 (without adapter)
Weight (kg)	0,4

Description	Range (mg/l)	For	Pk	Cat. No.
Spectroquant® colorimeters Picco				
Picco colorimeter NO_3-N Spectroquant®	1,0 - 225**	1.09713.0001; 1.14563.0001; 1.14764.0001; 1.00614.0001	1	**1.73603.0001**
Picco colorimeter Fluoride Spectroquant®	25 µg - 20	F*: 1.14598.0001; 1.14557.0001	1	**1.73606.0001**
Picco colorimeter Cl_2/ClO_2/O_3/cyanuric acid/pH Spectroquant®	Cl_2: 0,02 - 5,00 ClO_2 : 0,05 - 9,50 O_3: 0,02 - 3,40 $C_3H_3N_3O_3$: 2 - 160 pH: 6,4 - 8,8	Cl_2***: 1.00589.0001/2; 1.00602.0001/2 1.00599.0001 ClO_2 : 1.00608.0001 O_3: 1.00607.0001/2 $(CNOH)_3$: 1.19253.0001 pH : 1.01744.0001	1	**1.73607.0001**
Picco colorimeter COD Spectroquant®	10 - 3500** 0,5 - 10 g/l	1.14540.0001; 1.14541.0001; 1.14691.0001; 1.14555.0001	1	**1.73608.0001**

Description	Pk	Cat. No.
Round cells		
Empty cells, 16 mm with screw caps	25	**1.14724.0001**
Empty cells, 24 mm with screw caps	12	**1.73650.0001**

* Larger pack sizes are also available

** Total range covered by the kits. For details of the range of each kit please see the table of **Test kits, Spectroquant®**

*** Chlorine test kits available include free chlorine, total chlorine and also free and total chlorine.

Multiparameter colorimeter, portable, Spectroquant® Move 100

A handheld instrument designed for 'on the spot' measurements.

- More than 100 high quality Spectroquant® tests pre-programmed - covers all the important methods for routine analysis
- IP 68, dust tight and waterproof
- Accurate instrument: ±1 nm, filters with Δλ =5 (typical)
- Acid and solvent resistant tactile film keypad with acoustic feedback
- Auto off, 20 minutes after the last function
- 8 language options

Model	Move 100
Light source	LED
Wavelengths (nm)	430, 530, 560, 580, 610, 660
Photometric accuracy	±0,020 A at 1.000 A; ±0,052A at 2,600 A
Filter type	Interference filters
Storage capacity	1000 data sets
Display	Graphic display, 7 lines, 21 characters
Keypad	Acid and solvent resistant tactile film keypad
Operating conditions	5...40 °C; 30 - 90% RH
Interfaces	IR interface for data transfer, RJ45 connector for internet updates
Power supply	4× AA batteries
W×D×H (mm)	210×95×45
Weight (kg)	0,45

Description	Pk	Cat. No.
Spectroquant® Move 100	1	**1.73632.0001**

Description	Pk	Cat. No.
Accessories		
Spectroquant® Data Transfer, module for data transfer via infra-red to one of 3 optional interfaces to connect to a PC, a USB printer (with printer language HPPCL, version 5 or below), or alternative a serial printer (any ASCII printer)	1	**1.73633.0001**
Spectroquant® Update cable for Move 100, for method updates	1	**1.73634.0001**

Colorimeter, Spectroquant® Multy

The Spectroquant® Multy is the ideal instrument for an inexpensive yet wide ranging introduction to photometric water analysis. The equipment is pre-programmed for the use of over 130 Spectroquant® cell and reagent tests and covers all the essential parameters of wastewater and drinking water analysis, e.g. COD, total nitrogen, total phosphorus and many others. Also trace levels of cyanide, arsenic, cadmium and other materials can be measured very precisely. The broad range of easy to handle Spectroquant® test kits offers an optimal solution for each user. Rechargeable batteries are included, and together with the practical carrying case, enable the instrument to be used anywhere, anytime. Methods can be updated free of charge over the Internet.

For full range of tests see table 'Test Kits, Spectroquant®'.

- Easy to use
- Water resistant instrument (whilst not charging)
- Robust construction for field or laboratory use
- Battery recharging whilst using the instrument via integrated charger

Delivery information: Multy colorimeter, case, adapter unit for 16 mm round cells, lid for adapter unit, seven rechargeable batteries, lithium battery (to ensure data storage) interface cable for connection to PC, 3×16 mm round cells, 3×24 mm round cells.

Model	Multy
Optics	6 temperature compensated LEDs with interference filters, internal reference channel (dual beam technology).
Light source	6× LEDs
Wavelengths (nm)	430, 530, 560, 580, 610, 660
System check	Auto-diagnostic check of the instrument
Storage capacity	About 1000 data sets with date, time and registration number
Display	Large format graphic display
Keypad	Acid and solvent resistant, touch-sensitive with audible feedback
Operating conditions	Up to max. 90% rel. humidity (non condensing), ~0...40 °C
Interfaces	RS232 for printer and PC connection
Power supply	Mains/battery operation: 7× NiCd battery pack (AA/Mignon), integrated mains charger, integrated overload cut-out
W×D×H (mm)	~265×195×70 (instrument), 440×370×140 (case)

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Description	Pk	Cat. No.
Spectroquant® Multy	1	**1.73630.0001**

Description	Pk	Cat. No.
Accessories		
Spectroquant® verification standard for Multy colorimeter	1	**1.19302.0001**

Spectroquant reference standard for Picco and Multy colorimeters

A reference standard for chlorine, chlorine dioxide and ozone, that is designed to reassure the user about the accuracy and reliability of the results from the Picco and Multy colorimeters.

Delivery information: Standard includes four sealed cells including a Zero cell and stable coloured solutions and is supplied in a handy case with quality data, lot number and expiry date.

Description	Pk	Cat. No.
Spectroquant® reference standard for chlorine, chlorine dioxide and ozone	1	**1.19301.0001**

Photometers, Spectroquant® NOVA 30A/ NOVA 60/60A

Spectroquant® NOVA 30A

The NOVA 30A, the basic instrument is capable of running all the important cell tests for wastewater analysis, is compact and mobile, with both rechargeable battery and mains operation.

Spectroquant® NOVA 60/60 A

The NOVA 60A is an instrument for the routine analysis of all water types and is capable of measuring all the ready to use cell tests as well as the inexpensive reagent tests. Again the NOVA 60A unit is compact and mobile with both rechargeable battery and mains operation. The NOVA 60 is available with the same technical specification but is mains operation only.

All the NOVA units above include:

- Barcode reading of all Spectroquant® tests (auto-selection of method and then presentation of result)
- Integrated QA/QC checks - three modes, checking instrument (with Photocheck), the method (with Combicheck and Merck standard solutions acc. to NIST)) and sample volume (with Pipecheck)
- Turbidity correction
- Can be connected to PC for updating methods at no cost (requires cable)
- For some critical tests, measurement to ppb levels e.g. cyanide

Model	NOVA 30A	NOVA 60/60A
Light source	Tungsten halogen lamp, preset, no warm-up time	
Optical system	Single beam with 6 filters in array	Single beam with 12 filters in array
Wavelengths (nm)	340; 445; 525; 550; 605; 690	340; 410; 445; 500; 525; 550; 565; 605; 620; 665; 690; 820
Wavelength accuracy (nm)	±2	
Photometric range	–0,300 to 3,200 A	
Measuring modes	Absorbance, concentration, transmission	
Display	128×64 pixel	
Special method functions	-	50 free programmable methods
Storage capacity	500 results	1000 results
Kits	Most Spectroquant® cell tests	All Spectroquant® cell and reagent tests
Cell compartment	16 mm Ø cells	16 mm Ø cells and 10, 20, 50 mm cuvettes
Power requirements	100 - 240 V; 50 - 60 Hz	
Rechargeable battery	Yes	NOVA 60 - No NOVA 60A - Yes
Battery (optional) life	1 working day	
Weight (kg)	2,8 incl. battery	2,3 (NOVA 60) 2,8 incl. battery (NOVA 60A)

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Description	Type	Pk	Cat. No.
Photometer NOVA 30A Spectroquant®	Single beam with filters	1	**1.09748.0001**
Photometer NOVA 60 Spectroquant® (mains operation only)	Single beam with filters	1	**1.09751.0001**
Photometer NOVA 60A Spectroquant®	Single beam with filters	1	**1.09752.0001**

Description	Pk	Cat. No.
Accessories		
Positioning aid for 10 mm plastic cuvette Spectroquant®	1	**1.00787.0001**
Replacement lamp	1	**1.09749.0001**
Case	1	**1.09769.0001**
PC cable	1 SET	**1.14667.0001**
Multi-ACHAT II for Windows	1	**1.14964.0001**
Rectangular cells		
Rectangular cells, 10 mm	2	**1.14946.0001**
Rectangular cells, 20 mm	2	**1.14947.0001**
Rectangular cells, 50 mm	2	**1.14944.0001**
Round cells		
Empty cells, 16 mm with screw caps	25	**1.14724.0001**

Spectrophotometers Spectroquant® Pharo 100 and Pharo 300

The Spectroquant® Pharo range of instruments extends and complements the existing NOVA range from Merck. These scanning spectrophotometers have a bandwidth of 4 nm and excellent accuracy and reproducibility. The Pharo spectrophotometers also incorporate barcode identification for all Spectroquant® test kits and have automatic identification of round or rectangular cells with no requirement for an adapter. The large format display, alphanumeric keyboard and simple to use menu navigation combined with updatable methods from the Internet make these spectrophotometers a versatile and flexible tool in the laboratory.

- Fully functional spectrophotometers, in visible range (Pharo 100) and UV-Vis range (Pharo 300)
- Compatible with all Spectroquant® test kits with automatic barcode identification
- User-defined functionality includes recording spectra and kinetic profiles and also multi-wavelength measurements
- Comprehensive instrument supported Analytical Quality Assurance (AQA)
- 1× RS232 and 2× USB ports for easy transfer of data
- Flexible cell formats, round cells, rectangular cells (10 - 50 mm path length)

* Other languages may also become available - please contact your local VWR office.

Model	Pharo 100	Pharo 300
Light source	Tungsten	Xenon
Optical system	Single beam	
Wavelength range (nm)	320 - 1100	190 - 1100
Spectral bandwidth (nm)	4	
Wavelength accuracy (nm)	±1	
Photometric range	±3,3 A	
Photometric accuracy	0,003 A at <0,600 A; 0,5% of reading for 0,600≤A≥2,000	
Scan	1 nm increments with selectable wavelength range	
Measuring modes	Concentration, absorbance, transmission, multi-wavelengths, scans + kinetics in A or T mode	
Results storage	1000 single measured values, 4 MB for scans and kinetics	
Interfaces	RS232, USB-A, USB-B	
Languages	English, German, French, Spanish and Italian*	
Cells	16 mm round, 10/20/50 mm rectangular with auto-recognition	
Protection class	IP 30	IP 31
Power requirements	100 - 240 V/50 - 60 Hz with country specific power cable 2,5 m	
W×D×H (mm)	404×314×197	
Weight without power supply (kg)	3,7	

Description	Pk	Cat. No.
Spectroquant® Pharo 100	1	**1.00706.0001**
Spectroquant® Pharo 300	1	**1.00707.0001**

Description	Pk	Cat. No.
Accessories		
Halogen lamp for Pharo 100	1	**1.00660.0001**
Carrying case for Pharo 100 and 300	1	**1.00670.0001**
Positioning aid for 10 mm plastic cuvette Spectroquant®	1	**1.00787.0001**

Cuvettes and tubes for Picco, Multy, Nova and Pharo

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Description	Optical path length (mm)	For unit	Pk	Cat. No.
Rectangular cells				
Rectangular cells, 10 mm	10	Pharo, Nova 60	2	**1.14946.0001**
Rectangular cells, 10 mm, quartz	10	Pharo, Nova 60	2	**1.00784.0001**
Rectangular cells, 20 mm	20	Pharo, Nova 60	2	**1.14947.0001**
Rectangular cells, 50 mm	50	Pharo, Nova 60	2	**1.14944.0001**
Semi-micro rectangular cells, black side walls and base, 50 mm	50	Pharo, Nova 60	2	**1.73502.0001**
Round cells				
Empty cells, 16 mm with screw caps		Pharo, Nova 30/60, Multy, Picco, Move 100	25	**1.14724.0001**
Empty cells, 24 mm with screw caps		Multy, Picco, Move 100	12	**1.73650.0001**

Spectroquant® PhotoCheck

The PhotoCheck test set is designed for testing the wavelength accuracy of all Merck photometers and spectrophotometers. It can be used as a secondary standard for testing instruments according to DIN/ISO 9000 and ISO 14000. The stable colour solutions can be used to test the following spectrophotometer filters and wavelength settings: 445 and 446 nm, 520 and 525 nm and 690 nm. The accuracy of the wavelength setting and the linearity of the extinction measurement is checked with 4 solutions per wavelength.
The traceability of these test solutions to international standards is guaranteed by examining them in a reference photometer that is checked against the primary standard (NIST standard). These values are properly documented and supplied as part of the set.

Description	Pk	Cat. No.
Spectroquant® PhotoCheck	1 Set	**1.14693.0001**

Spectroquant® PipeCheck

The PipeCheck test set is used to check the accuracy of the pipettes employed by the user. The specified volume is pipetted into a round cell and measured, then the photometer compares the extinction with the reference value supplied. The acceptable tolerances can be found in the package insert.

The measured extinctions can be documented and are therefore a further element in the monitoring of quality and of compliance with DIN/ISO 9000 and ISO 14000.

Delivery information: Supplied with 24 cells containing test solutions and 4 cells with corresponding reference solutions.

Description	Pk	Cat. No.
Spectroquant® PipeCheck	25 Tests	**1.14962.0001**

Test kits, Spectroquant®

All Spectroquant® test kits can be used with the **Pharo** range of spectrophotometers and Nova 60/60A instruments. Tests can be used not only on photometers and spectrophotometer from Merck Millipore, but also on photometers and spectrophotometers from other suppliers (programming details available on request).

Spectroquant® cell test kits

- Very user-friendly, validated methods
- All the necessary reagents for the analysis are contained in the cells for most the test parameters
- Packaging design protects the cells from fluctuation of temperature and moisture during storage and transport
- The barcode on the cells ensures the correct method of analysis is chosen - eliminating mistakes and reducing set up times.

Spectroquant® reagent test kits

- Highly stable, ready-to-use reagent mixtures in a user friendly design
- Free selection of appropriate cell format according to the measuring range
- Long shelf life up to 3 years - all at room temperature
- Automatic selection of the correct method with help of AutoSelector barcode identification

Note: The range quoted in the table below refers to the Nova and Pharo instruments. For some test kits the measuring range available for the Spectroquant® Multy and Move 100 instruments may be reduced.

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Description	Range (mg/l)	For unit	Pk	Cat. No.
Acid capacity cell test to pH 4,3 (total alkalinity)	20-400 $CaCO_3$	Pharo, Nova 30/60, Multy, Move	120 Tests	**1.01758.0001**
Aluminium cell test	0,02-0,50 Al	Pharo, Nova 30/60, Multy, Move	25 Tests	**1.00594.0001**
Aluminium test	0,020-1,20 Al	Pharo, Nova 60, Multy, Move	350 Tests	**1.14825.0001**
Ammonium cell test	0,010-2,000 NH_4-N; 0,01-2,58 NH_4	Pharo, Nova 30/60, Multy, Move	25 Tests	**1.14739.0001**
Ammonium cell test	0,20-8,00 NH_4-N; 0,26-10,30 NH_4	Pharo, Nova 30/60, Multy, Move, Picco	25 Tests	**1.14558.0001**
Ammonium cell test	0,5-16,0 NH_4-N; 0,6-20,6 NH_4	Pharo, Nova 30/60	25 Tests	**1.14544.0001**
Ammonium cell test	4,0-80,0 NH_4-N; 5,2-103,0 NH_4	Pharo, Nova 30/60, Multy, Move, Picco	25 Tests	**1.14559.0001**
Ammonium test	0,010-3,00 NH_4-N; 0,013-3,86 NH_4	Pharo, Nova 60, Multy, Move	500 Tests	**1.14752.0001**
Ammonium test	0,010-3,00 NH_4-N; 0,013-3,86 NH_4	Pharo, Nova 60, Multy, Move	250 Tests	**1.14752.0002**
Ammonium test	2,0-150 NH_4-N; 2,6-193 NH_4	Pharo, Nova 60, Multy, Move, Picco	100 Tests	**1.00683.0001**
AOX cell test*[1]	0,05-2,50 AOX	Pharo, Nova 30/60, Multy, Move	25 Tests	**1.00675.0001**
AOX enrichment set	-	Pharo, Nova 30/60, Multy, Move	2 Tests	**1.00678.0001**
AOX sample preparation set	-	Pharo, Nova 30/60, Multy, Move	25 Tests	**1.00677.0001**
Arsenic reagent-7 (zinc granular)*[2]	-		500 g	**1.08780.0500**
Arsenic test*[2]	0,001-0,100 As	Pharo, Nova 60, Multy, Move	30 Tests	**1.01747.0001**
BOD cell test*[3]	0,5-3000	Pharo, Nova 30/60, Multy, Move	50 Tests	**1.00687.0001**
BOD nutrient salt mixture (with allyl thiourea) for 12 x 1 l nutrient salt solution	-	Pharo, Nova 30/60, Multy	12 Tests	**1.00688.0001**
Boron cell test	0,05-2,00 B	Pharo, Nova 60, Multy, Move	25 Tests	**1.00826.0001**
Boron test	0,050-0,800 B	Pharo, Nova 60	60 Tests	**1.14839.0001**
Bromine test	0,020-10,00 Br_2	Pharo, Nova 60, Multy, Move	200 Tests	**1.00605.0001**
Cadmium cell test	0,025-1,000 Cd	Pharo, Nova 30/60, Multy, Move	25 Tests	**1.14834.0001**
Cadmium test	0,002-0,500 Cd	Pharo, Nova 60, Multy, Move	55 Tests	**1.01745.0001**
Calcium cell test	10-250 Ca; 14-350 CaO; 25-624 $CaCO_3$	Pharo, Nova 30/60, Multy	25 Tests	**1.00858.0001**
Calcium test	0,20 - 4,00 Ca	Pharo, Nova 60	100 Tests	**1.00049.0001**
Calcium test	5-160 Ca; 7-224 CaO; 12-400 $CaCO_3$; 1,0 -15,0 Ca; 1,4-21,0 CaO; 2,5-37,5 $CaCO_3$	Pharo, Nova 60, Multy, Move	100 Tests	**1.14815.0001**
Chloride cell test	0,5-15,0 Cl	Pharo, Nova 60, Multy, Move	25 Tests	**1.01804.0001**
Chloride cell test	5-125 Cl	Pharo, Nova 30/60, Multy, Move	25 Tests	**1.14730.0001**
Chloride test	0,10-5,00 Cl	Pharo, Nova 60, Multy, Move	100 Tests	**1.01807.0001**
Chloride test	2,5-250 Cl	Pharo, Nova 60, Multy, Move	100 Tests	**1.14897.0001**
Chloride test	2,5-250 Cl	Pharo, Nova 60, Multy, Move	175 Tests	**1.14897.0002**
Chlorine, cells and accessories for photometric Cl_2 measurement*[4]		-	25	**1.00089.0001**
Chlorine (free + total) cell test*[7-3]	0,03-6,00 Cl_2	Pharo, Nova 60, Multy, Move, Picco	200 Tests	**1.00597.0001**
Chlorine cell test (free chlorine)*[7-2]	0,03-6,00 Cl_2	Pharo, Nova 30/60, Multy, Move	200 Tests	**1.00595.0001**
Chlorine dioxide test	0,020-10,00 ClO_2	Pharo, Nova 60, Multy, Move, Picco	200 Tests	**1.00608.0001**
Chlorine reagent Cl_2-1*[4]	-	Pharo, Nova 60, Multy, Move, Picco	200 Tests	**1.00086.0001**
Chlorine reagent Cl_2-2*[4]	-	Pharo, Nova 60, Multy, Move, Picco	400 Tests	**1.00087.0001**
Chlorine reagent Cl_2-3*[4]	-	Pharo, Nova 30/60, Move, Picco, Multy	600 Tests	**1.00088.0001**
Chlorine test (100 tests free chlorine+ 100 tests total chlorine)*[7-3]	0,010-6,00 Cl_2	Pharo, Nova 60, Multy, Move, Picco	200 Tests	**1.00599.0001**
Chlorine test (free chlorine)*[7-2]	0,010-6,00 Cl_2	Pharo, Nova 60, Multy, Move	1.200 Tests	**1.00598.0001**
Chlorine test (free chlorine)*[7-2]	0,010-6,00 Cl_2	Pharo, Nova 60, Multy, Move	200 Tests	**1.00598.0002**
Chlorine test (total chlorine)*[7-3]	0,010-6,00 Cl_2	Pharo, Nova 60, Multy, Move, Picco	200 Tests	**1.00602.0001**
Chlorine test (total chlorine)*[7-3]	0,010-6,00 Cl_2	Pharo, Nova 60, Multy, Move, Picco	1.200 Tests	**1.00602.0002**
Chromate cell test*[7-1]	0,05-2,00 Cr; 0,11-4,46 CrO_4	Pharo, Nova 30/60, Multy, Move	25 Tests	**1.14552.0001**
Chromate test	0,010-3,00 Cr; 0,02-6,69 CrO_4	Pharo, Nova 60, Multy, Move	250 Tests	**1.14758.0001**
COD cell test (Hg-free)	10-150	Pharo, Nova 30/60, Move	25 Tests	**1.09772.0001**
COD cell test (Hg-free)	100-1500	Pharo, Nova 30/60, Move	25 Tests	**1.09773.0001**
COD cell test*[7-1]	10-150	Pharo, Nova 30/60, Multy, Move, Picco	25 Tests	**1.14540.0001**
COD cell test*[7-1]	25-1500	Pharo, Nova 30/60, Multy, Move, Picco	25 Tests	**1.14541.0001**
COD cell test*[7-1]	500-10000	Pharo, Nova 30/60, Multy, Move, Picco	25 Tests	**1.14555.0001**
COD cell test*[7-1]	4,0-40,0	Pharo, Nova 30/60	25 Tests	**1.14560.0001**
COD cell test*[7-1]	50-500	Pharo, Nova 30/60, Multy, Move	25 Tests	**1.14690.0001**
COD cell test*[7-1]	300-3500	Pharo, Nova 30/60, Multy, Move, Picco	25 Tests	**1.14691.0001**
COD cell test*[7-1]	15-300	Pharo, Nova 30/60, Multy, Move	25 Tests	**1.14895.0001**
COD cell test*[8]	5,0-80,0	Pharo, Nova 60, Multy, Move	25 Tests	**1.01796.0001**
COD cell test*[8]	5000-9000	Pharo, Nova 60, Multy, Move	25 Tests	**1.01797.0001**
Copper cell test	0,05-8,00 Cu	Pharo, Nova 30/60, Multy, Move	25 Tests	**1.14553.0001**
Copper test	0,02-6,00 Cu	Pharo, Nova 60, Multy, Move	250 Tests	**1.14767.0001**
Cyanide cell test	0,010 - 0,500 CN	Pharo, Nova 60, Multy, Move	25 Tests	**1.02531.0001**
Cyanide cell test*[7-1]	0,010-0,500 CN	Pharo, Nova 30/60, Multy, Move	25 Tests	**1.14561.0001**
Cyanide test	0,002-0,500 CN	Pharo, Nova 60, Multy, Move	100 Tests	**1.09701.0001**
Cyanuric Acid test (boric acid-free)	2-160 mg/l	Pharo, Nova 60, Multy, Move, Picco	100 Tests	**1.19253.0001**
Fluoride cell test	0,10-1,80 F; 0,025-0,500 F	Pharo, Nova 60, Multy, Move	1	**1.00809.0001**
Fluoride test	0,02-2,00 F	Pharo, Nova 60, Multy, Move	250 ml	**1.00822.0250**
Fluoride test	0,10-2,00 F	Pharo, Nova 60, Multy, Move, Picco	100 Tests	**1.14598.0001**
Fluoride test	0,10-2,00 F	Pharo, Nova 60, Multy, Move, Picco	250 Tests	**1.14598.0002**
Formaldehyde cell test	0,10-8,00 HCHO	Pharo, Nova 30/60	25 Tests	**1.14500.0001**
Formaldehyde test	0,02-8,00 HCHO	Pharo, Nova 60	100 Tests	**1.14678.0001**
Gold test	0,5-12,0 Au	Pharo, Nova 60	75 Tests	**1.14821.0002**
Hydrazine test	0,005-2,00 N_2H_4	Pharo, Nova 60, Multy, Move	100 Tests	**1.09711.0001**
Hydrogen peroxide cell test	2,0-20,0 H_2O_2; 0,25-5,00 H_2O_2	Pharo, Nova 60	25 Tests	**1.14731.0001**
Hydrogen peroxide test	0,015 - 6,00 H_2O_2	Pharo, Nova 60, Multy	100 Tests	**1.18789.0001**

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Description	Range (mg/l)	For unit	Pk	Cat. No.
Iodine test	0,050 - 10,00 I_2	Pharo, Nova 60, Multy, Move	200 Tests	**1.00606.0001**
Iron cell test	0,05-4,00 Fe	Pharo, Nova 30/60, Multy, Move	25 Tests	**1.14549.0001**
Iron cell test	1,0-50,0 Fe	Pharo, Nova 30/60	25 Tests	**1.14896.0001**
Iron test	0,005-5,00 Fe	Pharo, Nova 60, Multy, Move	1.000 Tests	**1.14761.0001**
Iron test	0,005-5,00 Fe	Pharo, Nova 60, Multy, Move	250 Tests	**1.14761.0002**
Iron test	0,010-5,00 Fe	Pharo, Nova 60, Multy, Move	150 Tests	**1.00796.0001**
Lead cell test	0,10-5,00 Pb	Pharo, Nova 30/60, Multy, Move	25 Tests	**1.14833.0001**
Lead test	0,010-5,00 Pb	Pharo, Nova 60, Multy, Move	50 Tests	**1.09717.0001**
Magnesium cell test	5,0-75,0 Mg	Pharo, Nova 30/60, Multy, Move	25 Tests	**1.00815.0001**
Manganese cell test	0,10-5,00 Mn	Pharo, Nova 30/60, Multy, Move	25 Tests	**1.00816.0001**
Manganese test	0,005-2,00 Mn	Pharo, Nova 60, Multy, Move	1	**1.01846.0001**
Manganese test	0,010-10,00 Mn	Pharo, Nova 60, Multy, Move	500 Tests	**1.14770.0001**
Manganese test	0,010-10,00 Mn	Pharo, Nova 60, Multy, Move	250 Tests	**1.14770.0002**
Molybdenum cell test	0,02-1,00 Mo	Pharo, Nova 30/60, Multy	25 Tests	**1.00860.0001**
Molybdenum test	0,5-45,0 Mo	Pharo, Nova 60, Multy, Move	100 Tests	**1.19252.0001**
Monochloramine test	0,050-10,00 Cl_2; 0,036-7,25 NH_2Cl; 0,010-1,96 NH_2Cl-N	Pharo, Nova 60, Multy, Move	150 Tests	**1.01632.0001**
Nickel cell test	0,10-6,00 Ni	Pharo, Nova 30/60, Multy, Move	25 Tests	**1.14554.0001**
Nickel test	0,02-5,00 Ni	Pharo, Nova 60, Multy, Move	250 Tests	**1.14785.0001**
Nitrate cell test	23-225 NO_3-N; 102-996 NO_3	Pharo, Nova 30/60, Picco	25 Tests	**1.00614.0001**
Nitrate cell test	0,5-18,0 NO_3-N; 2,2-79,7 NO_3	Pharo, Nova 30/60, Multy, Move	25 Tests	**1.14542.0001**
Nitrate cell test	0,5-25,0 NO_3-N; 2,2-110,7 NO_3	Pharo, Nova 30/60, Picco	25 Tests	**1.14563.0001**
Nitrate cell test	1,0-50,0 NO_3-N; 4-221 NO_3	Pharo, Nova 30/60, Picco	25 Tests	**1.14764.0001**
Nitrate cell test in seawater	0,10-3,00 NO_3-N; 0,4-13,3 NO_3	Pharo, Nova 60, Multy	25 Tests	**1.14556.0001**
Nitrate test	0,10-25,0 NO_3-N; 0,4-110,7 NO_3	Pharo, Nova 60, Picco	100 Tests	**1.09713.0001**
Nitrate test	0,10-25,0 NO_3-N; 0,4-110,7 NO_3	Pharo, Nova 60, Picco	250 Tests	**1.09713.0002**
Nitrate test	0,2-20 NO_3-N; 0,9-88,5 NO_3	Pharo, Nova 60, Multy, Move	100 Tests	**1.14773.0001**
Nitrate test in seawater	0,2-17,0 NO_3-N; 0,9-75,3 NO_3	Pharo, Nova 60	50 Tests	**1.14942.0001**
Nitrite cell test	1,0-90,0 NO_2-N; 3,3-295,2 NO_2	Pharo, Nova 30/60, Multy	25 Tests	**1.00609.0001**
Nitrite cell test	0,010-0,700 NO_2-N; 0,03-2,30 NO_2	Pharo, Nova 30/60, Multy, Move	25 Tests	**1.14547.0001**
Nitrite test	0,002-1,00 NO_2-N; 0,007-3,28 NO_2	Pharo, Nova 60, Multy, Move	1.000 Tests	**1.14776.0001**
Nitrite test	0,002-1,00 NO_2-N; 0,007-3,28 NO_2 mg/l	Pharo, Nova 60, Multy, Move	335 Tests	**1.14776.0002**
Nitrogen (total) cell test	0,5-15,0 N	Pharo, Nova 30/60, Picco	25 Tests	**1.00613.0001**
Nitrogen (total) cell test	0,5-15,0 N	Pharo, Nova 30/60, Multy, Move	25 Tests	**1.14537.0001**
Nitrogen (total) cell test	10-150 N	Pharo, Nova 30/60, Picco	25 Tests	**1.14763.0001**
Oxygen cell test	0,5-12,0 O_2	Pharo, Nova 30/60, Move	25 Tests	**1.14694.0001**
Oxygen scavengers test	0,020-0,500 DEHA	Pharo, Nova 60, Multy	200 Tests	**1.19251.0001**
Ozone test	0,010-4,00 O_3	Pharo, Nova 60, Multy, Move, Picco	200 Tests	**1.00607.0001**
Ozone test	0,010-4,00 O_3	Pharo, Nova 60, Multy, Move, Picco	1.200 Tests	**1.00607.0002**
pH cell test	pH 6,4-8,8	Pharo, Nova 30/60, Multy, Move, Picco	280 Tests	**1.01744.0001**
Phenol cell test	0,10-2,50 C_6H_5OH	Pharo, Nova 60, Multy, Move	25 Tests	**1.14551.0001**
Phenol test	0,002-5,00 C_6H_5OH	Pharo, Nova 60, Multy, Move	250 Tests	**1.00856.0001**
Phosphate cell test	3,0-100,0 PO_4-P; 9-307 PO_4; 7-229 P_2O_5	Pharo, Nova 30/60, Multy, Move	25 Tests	**1.00616.0001**
Phosphate cell test	0,5-25,0 PO_4-P; 1,5-76,7 PO_4; 1,1-57,3 P_2O_5	Pharo, Nova 30/60, Move	25 Tests	**1.14546.0001**
Phosphate cell test (PMB)	3,0-100 PO_4-P; 9-307 PO_4; 7-229 P_2O_5	Pharo, Nova 30/60, Multy, Move	1	**1.00673.0001**
Phosphate cell test*[7-3]	0,05-5,0 PO_4-P; 0,2-15,3 PO_4; 0,11-11,46 P_2O_5	Pharo, Nova 30/60, Multy, Move	1	**1.00474.0001**
Phosphate cell test*[7-3]	0,5-25,0 PO_4-P; 1,5-76,7 PO_4; 1,1-57,3 P_2O_5	Pharo, Nova 30/60, Multy, Move	25 Tests	**1.00475.0001**
Phosphate cell test*[7-3]	0,05-5,00 PO_4-P; 0,2-15,3 PO_4; 0,11-11,46 P_2O_5	Pharo, Nova 30/60, Multy, Move, Picco	25 Tests	**1.14543.0001**
Phosphate cell test*[7-3]	0,5-25,0 PO_4-P; 1,5-76,7 PO_4; 1,1-57,3 P_2O_5	Pharo, Nova 30/60, Multy, Move, Picco	25 Tests	**1.14729.0001**
Phosphate test	1,0-100,0 PO_4-P; 3-307 PO_4; 2-229 P_2O_5	Pharo, Nova 60, Picco, Multy	100 Tests	**1.00798.0001**
Phosphate test	0,5-30,0 PO_4-P; 1,5-92,0 PO_4; 1,1-68,7 P_2O_5	Pharo, Nova 60, Move	400 Tests	**1.14842.0001**
Phosphate test	0,010-5,0 PO_4-P; 0,03-15,3 PO_4; 0,02-11,46 P_2O_5	Pharo, Nova 60, Multy, Move	420 Tests	**1.14848.0001**
Phosphate test	0,010-5,0 PO_4-P; 0,03-15,3 PO_4; 0,02-11,46 P_2O_5	Pharo, Nova 60, Multy, Move	220 Tests	**1.14848.0002**
Potassium cell test	30-300 K	Pharo, Nova 30/60, Move	25 Tests	**1.00615.0001**
Potassium cell test	5,0-50,0 K	Pharo, Nova 30/60, Multy, Move	25 Tests	**1.14562.0001**
Residual hardness cell test	0,50–5,00 Ca; 0,070–0,700 °d; 0,087–0,874 °e; 0,12–1,25 °f; 0,70–7,00 CaO; 1,2–12,5 $CaCO_3$	Pharo, Nova 30/60, Multy, Move	25 Tests	**1.14683.0001**
Silicate (silicic acid) test	0,5-500 Si; 1,1-1070 SiO_2	Pharo, Nova 60, Multy, Move	100 Tests	**1.00857.0001**
Silicate (silicic acid) test	0,005-5 Si ; 00,11-10,7 SiO_2	Pharo, Nova 60, Multy, Move	300 Tests	**1.14794.0001**
Silver test	0,25-3,00 Ag	Pharo, Nova 60	100 Tests	**1.14831.0001**
Sodium cell test in nutrient solutions for fertilisation	10-300 Na	Pharo, Nova 30/60, Move	25 Tests	**1.00885.0001**
Sulphate cell test	50-500 SO_4	Pharo, Nova 30/60, Multy	25 Tests	**1.00617.0001**
Sulphate cell test	1,0-50 SO_4	Pharo, Nova 60, Move	25 Tests	**1.02532.0001**
Sulphate cell test*[7-1]	5-250 SO_4	Pharo, Nova 30/60, Multy, Move	25 Tests	**1.14548.0001**
Sulphate cell test*[7-1]	100-1000 SO_4	Pharo, Nova 30/60, Multy, Move	25 Tests	**1.14564.0001**
Sulphate test	5-300 SO_4	Pharo, Nova 60, Multy, Move	100 Tests	**1.02537.0001**
Sulphate test	5-300 SO_4	Pharo, Nova 60, Multy, Move	1.000 Tests	**1.02537.0002**
Sulphate test	25-300 SO_4	Pharo, Nova 60	200 Tests	**1.14791.0001**
Sulphide test	0,020-1,50 S	Pharo, Nova 60, Multy, Move	220 Tests	**1.14779.0001**
Sulphite cell test	1,0-20,0 SO_3	Pharo, Nova 60, Multy, Move	25 Tests	**1.14394.0001**
Sulphite test	1,0 - 60,0 SO_3; 0,8 - 48,0 SO_2	Pharo, Nova 60, Multy, Move	150 Tests	**1.01746.0001**
Sulphuric acid 95-97% EMSURE® ISO analytical reagent*[2]	-	Pharo, Nova 30/60, Multy	1 l	**1.00731.1000**
Surfactants (anionic) cell test	0,05–2,00	Pharo, Nova 60, Multy	25 Tests	**1.02552.0001**

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Description	Range (mg/l)	For unit	Pk	Cat. No.
Surfactants (anionic) cell test	0,05–2,00 MBAS	Pharo, Nova 60, Multy	25 Tests	**1.14697.0001**
Surfactants (cationic) cell test	0,05-1,50 CTAB	Pharo, Nova 60, Multy	25 Tests	**1.01764.0001**
Surfactants (nonionic) cell test	0,10–7,50 Triton X-100	Pharo, Nova 30/60, Multy, Move	25 Tests	**1.01787.0001**
Tin cell test	0,10-2,50 Sn	Pharo, Nova 60, Multy	25 Tests	**1.14622.0001**
TOC cell test*5	5,0-80,0 TOC	Pharo, Nova 30/60, Multy	25 Tests	**1.14878.0001**
TOC cell test*5	50-800 TOC	Pharo, Nova 30/60, Multy	25 Tests	**1.14879.0001**
Total hardness cell test	5–215 Ca; 0,7–30,1 °d; 0,9–37,6 °e; 1,2–53,7 °f; 7–300 CaO; 12–537 $CaCO_3$	Pharo, Nova 30/60, Multy, Move	25 Tests	**1.00961.0001**
Zinc cell test	0,025-1,000 Zn	Pharo, Nova 30/60, Multy, Move	25	**1.00861.0001**
Zinc cell test	0,20-5,00 Zn	Pharo, Nova 30/60, Multy, Move	25 Tests	**1.14566.0001**
Zinc test*6	0,05-2,50 Zn	Pharo, Nova 60	100 Tests	**1.14832.0001**
Zinc test reagent-6 (isobutylmethylketone GR)	-	Pharo, Nova 60	1 l	**1.06146.1000**

*1 AOX Enrichment Set 1.00678.0001 and AOX Sample Preparation Set 1.00677.0001 required
*2 Arsenic reagents 2 and 7, 1.00731.1000 and 1.08780.0500 together with 1.73501.0001 required
*3 BOD nutrient salt mixture 1.00687 required
*4 Reagents for free chlorine testing are reagent Cl_2-1 1.00086.0001 and reagent Cl_2-2 1.00087.0001 together with empty cell and accessories 1.00089.0001
Reagents for total chlorine are reagent Cl_2-1 1.00086.0001, reagent Cl_2-2 1.00087.0001 and reagent Cl_2-3 1.00088.0001 together with empty cell and accessories 1.00089.0001
*5 TOC screw caps for digestion required
*6 Zinc reagent-6 required
*7 This method is officially recognised by the USEPA as an alternative method for the investigation of the following:
*7-1 wastewater
*7-2 drinking water
*7-3 respectively drinking water and waste water
*8 COD cell tests fully comply with ISO 15705

COD cell test for non Merck photometers, Spectroquant®

Compatible with many Hach® photometers and require no programming to measure the tests.

- 16 mm cells
- Conforms to ISO 15705

Description	Range	Pk	Cat. No.
COD cell test	0 - 40 mg/l	25 Tests	**1.18750.0001**
COD cell test	0 - 150 mg/l	25 Tests	**1.18751.0001**
COD cell test	0 - 1500 mg/l	25 Tests	**1.18752.0001**
COD cell test	0 - 15000 mg/l	25 Tests	**1.18753.0001**

Standards, Spectroquant® CombiCheck

Spectroquant® CombiCheck solutions are ready to use multiparameter standards to be used to QC the Spectroquant® cell and reagent tests. Each pack contains a standard solution and a spiking solution. Both solutions can be used for quality assurance as they are already made up to the correct concentration.

The standard solution can be used to confirm the accuracy of the results from the Spectroquant® system as a whole (photometer, reagents, analytical procedure, implementation). The spiking solution can be used to test for sample-dependent effects by measuring the recovery and confirms the suitability of the sample preparation technique.

The maximum number of determinations when using the standard solution depends upon the test system used.

Spectroquant® CombiCheck 10	
Ammonium	4,00±0,30 mg/l NH_4-N
Chloride	25±6 mg/l Cl
COD	80±12 mg/l COD
Nitrate	2,5±0,25 mg/l NO_3-N
Phosphate	0,80±0,08 mg/l PO_4-P
Sulphate	100±15 mg/l SO_4
Spectroquant® CombiCheck 20	
Ammonium	12,0±1,0 mg/l NH_4-N
Chloride	60±10 mg/l Cl
COD	750±75 mg/l COD
Nitrate	9,0±0,9 mg/l NO_3
Phosphate	8,0±0,7 mg/l PO_4-P
Sulphate	500±75 mg/l SO_4
Spectroquant® CombiCheck 30	

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Cadmium	0,500±0,060 mg/l Cd
Iron	1,00±0,15 mg/l Fe
Copper	2,00±0,20 mg/l Cu
Manganese	1,00±0,15 mg/l Mn
Spectroquant® CombiCheck 40	
Aluminum	0,75±0,08 mg/l Al
Lead	2,00±0,20 mg/l Pb
Nickel	2,00±0,20 mg/l Ni
Zinc	2,00±0,40 mg/l Zn
Spectroquant® CombiCheck 50	
Ammonium	1,00±0,10 mg/l NH_4-N
COD	20,0±4,0 mg/l COD
Nitrogen	5,0±0,70 mg/l N
Spectroquant® CombiCheck 60	
Chloride	125±13 mg/l Cl
COD	250±25 mg/l COD
Spectroquant® CombiCheck 70	
Ammonium	50,0±5,0 mg/l NH_4-N
COD	5000±400 mg/l COD
Nitrogen	50±7 mg/l N
Spectroquant® CombiCheck 80	
COD	1500±150 mg/l COD
Nitrate	25,0±2,5 mg/l NO_3
Phosphate	15,0±1,0 mg/l PO_4-P

Description	Pk	Cat. No.
Spectroquant® CombiCheck 10	1 Set	**1.14676.0001**
Spectroquant® CombiCheck 20	1 SET	**1.14675.0001**
Spectroquant® CombiCheck 30	1 SET	**1.14677.0001**
Spectroquant® CombiCheck 40	1 SET	**1.14692.0001**
Spectroquant® CombiCheck 50	1 SET	**1.14695.0001**
Spectroquant® CombiCheck 60	1 SET	**1.14696.0001**
Spectroquant® CombiCheck 70	1 SET	**1.14689.0001**
Spectroquant® CombiCheck 80	1 SET	**1.14738.0001**

Spectroquant® standards - NIST traceable

A range of standard solutions for photometric water analysis which are traceable to SRM from NIST. The concentrations available are designed for use with Spectroquant® test kits, but are equally applicable to standard methods or for use with other manufacturers' relevant test kits.

- Range of concentrations for each parameter
- Exact concentration and measurement uncertainty printed on the bottle label
- No requirement for further dilutions

Description	Concentration mg/l in H_2O	For test kit(s)	Pk	Cat. No.
Ammonium standard solution	0,400 NH_4-N	1.14739; 1.14752; 1.14558	100 ml	**1.25022.0100**
	1,00 NH_4-N	1.14739; 1.14752; 1.14558; 1.14544	100 ml	**1.25023.0100**
	2,00 NH_4-N	1.14752; 1.14558; 1.14544	100 ml	**1.25024.0100**
	6,00 NH_4-N	1.14558; 1.14544; 1.14559; 1.00683	100 ml	**1.25025.0100**
	12,00 NH_4-N	1.14544; 1.14559; 1.0683	100 ml	**1.25026.0100**
	50,00 NH_4-N	1.14559; 1.0683	100 ml	**1.25027.0100**
COD standard solution	20,0 COD	1.14560	100 ml	**1.25028.0100**
	100 COD	1.14540; 1.14895; 1.14690; 1.14541	100 ml	**1.25029.0100**
	200 COD	1.14895; 1.14690; 1.14541	100 ml	**1.25030.0100**
	400 COD	1.14690; 1.14541; 1.14691	100 ml	**1.25031.0100**
	1000 COD	1.14541; 1.14691; 1.14555	100 ml	**1.25032.0100**
	2000 COD	1.14691; 1.14555	100 ml	**1.25033.0100**
	8000 COD	1.14555	100 ml	**1.25034.0100**
	50000 COD	1.01797.0001	100 ml	**1.25035.0100**

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Description	Concentration mg/l in H_2O	For test kit(s)	Pk	Cat. No.
Nitrate standard solution	0,50 NO_3-N	1.14556; 1.14942; 1.09713; 1.14773	100 ml	**1.25036.0100**
	2,50 NO_3-N	1.14556; 1.14942; 1.09713; 1.14773; 1.14563; 1.14542; 1.14764	100 ml	**1.25037.0100**
	15,0 NO_3-N	1.14942; 1.09713; 1.14773; 1.14563; 1.14542; 1.14764	100 ml	**1.25038.0100**
	40,0 NO_3-N	1.14764; 1.00614	100 ml	**1.25039.0100**
	200 NO_3-N	1.00614	100 ml	**1.25040.0100**
Nitrite standard solution	0,200 NO_2-N	1.14547; 1.14776	100 ml	**1.25041.0100**
	40,0 NO_2-N	1.00609	100 ml	**1.25042.0100**
Nitrogen (total) standard solution	2,50 N	1.00613; 1.14537	100 ml	**1.25043.0100**
	12,0 N	1.00613; 1.14537; 1.14763	100 ml	**1.25044.0100**
	100 N	1.14763	100 ml	**1.25045.0100**
Phosphorus (total) standard solution	0,400 PO_4-P	1.14848; 1.14543	100 ml	**1.25046.0100**
	4,00 PO_4-P	1.14848; 1.14543; 1.14729; 1.11798	100 ml	**1.25047.0100**
	15,0 PO_4-P	1.14729; 1.11798; 1.00616	100 ml	**1.25048.0100**
Sulphate standard solution	40 SO_4	1.14548; 1.14791	100 ml	**1.25050.0100**
	125 SO_4	1.14548; 1.14791; 1.00617; 1.14564	100 ml	**1.25051.0100**
	400 SO_4	1.00617; 1.14564	100 ml	**1.25052.0100**
	800 SO_4	1.14564	100 ml	**1.25053.0100**
Nitrate standard solution	0,50 NO_3-N	1.14556; 1.14942; 1.09713; 1.14773	100 ml	**1.25036.0100**
	2,50 NO_3-N	1.14556; 1.14942; 1.09713; 1.14773; 1.14563; 1.14542; 1.14764	100 ml	**1.25037.0100**
	15,0 NO_3-N	1.14942; 1.09713; 1.14773; 1.14563; 1.14542; 1.14764	100 ml	**1.25038.0100**
	40,0 NO_3-N	1.14764; 1.00614	100 ml	**1.25039.0100**
	200 NO_3-N	1.00614	100 ml	**1.25040.0100**
Nitrite standard solution	0,200 NO_2-N	1.14547; 1.14776	100 ml	**1.25041.0100**
	40,0 NO_2-N	1.00609	100 ml	**1.25042.0100**
Nitrogen (total) standard solution	2,50 N	1.00613; 1.14537	100 ml	**1.25043.0100**
	12,0 N	1.00613; 1.14537; 1.14763	100 ml	**1.25044.0100**
	100 N	1.14763	100 ml	**1.25045.0100**
Phosphorus (total) standard solution	0,400 PO_4-P	1.14848; 1.14543	100 ml	**1.25046.0100**
	4,00 PO_4-P	1.14848; 1.14543; 1.14729; 1.11798	100 ml	**1.25047.0100**
	15,0 PO_4-P	1.14729; 1.11798; 1.00616	100 ml	**1.25048.0100**
Sulphate standard solution	40 SO_4	1.14548; 1.14791	100 ml	**1.25050.0100**
	125 SO_4	1.14548; 1.14791; 1.00617; 1.14564	100 ml	**1.25051.0100**
	400 SO_4	1.00617; 1.14564	100 ml	**1.25052.0100**

Standard solutions for analytical quality assurance

The standard solutions offered below can be adjusted to the final concentration for the measurement range of the test system by dilution. In addition, these standards can be used to prepare spiking solutions for the standard addition procedure. They provide an economic and simple method of analytical quality control.

All CertiPUR® standard solutions (apart from the AOX, BOD and COD reference solutions) can be traced back to NIST.

Description	Concentration	Pk	Cat. No.
Aluminium	1000 (mg/l)	100 ml	**1.19770.0100**
Aluminium	1000 (mg/l)	500 ml	**1.19770.0500**
Ammonia	1000 (mg/l)	500 ml	**1.19812.0500**
Antimony	1000 (mg/l)	100 ml	**1.70204.0100**
Antimony	1000 (mg/l)	500 ml	**1.70204.0500**
AOX standard*	0,2 - 2,0 (mg/l)	6 Tests	**1.00680.0001**
Arsenic	1000 (mg/l)	100 ml	**1.19773.0100**
Arsenic	1000 (mg/l)	500 ml	**1.19773.0500**
BOD Spectroquant® standard**	210 (mg/l)	10 Tests	**1.00718.0001**
Boron	1000 (mg/l)	100 ml	**1.19500.0100**
Boron	1000 (mg/l)	500 ml	**1.19500.0500**
Cadmium	1000 (mg/l)	100 ml	**1.19777.0100**
Cadmium	1000 (mg/l)	500 ml	**1.19777.0500**

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Description	Concentration	Pk	Cat. No.
Calcium***	1000 (mg/l)	100 ml	**1.19778.0100**
Calcium***	1000 (mg/l)	500 ml	**1.19778.0500**
Chloride	1000 (mg/l)	500 ml	**1.19897.0500**
Chromate	1000 (mg/l)	500 ml	**1.19780.0500**
Chrome	1000 (mg/l)	100 ml	**1.19779.0100**
Chrome	1000 (mg/l)	500 ml	**1.19779.0500**
Cobalt	1000 (mg/l)	100 ml	**1.19785.0100**
Cobalt	1000 (mg/l)	500 ml	**1.19785.0500**
Copper	1000 (mg/l)	100 ml	**1.19786.0100**
Copper	1000 (mg/l)	500 ml	**1.19786.0500**
Cyanide	1000 (mg/l)	500 ml	**1.19533.0500**
Fluoride	1000 (mg/l)	500 ml	**1.19814.0500**
Gold	1000 (mg/l)	100 ml	**1.70216.0100**
Gold	1000 (mg/l)	500 ml	**1.70216.0500**
Iron	1000 (mg/l)	100 ml	**1.19781.0100**
Iron	1000 (mg/l)	500 ml	**1.19781.0500**
Lead	1000 (mg/l)	100 ml	**1.19776.0100**
Lead	1000 (mg/l)	500 ml	**1.19776.0500**
Magnesium	1000 (mg/l)	100 ml	**1.19788.0100**
Magnesium	1000 (mg/l)	500 ml	**1.19788.0500**
Manganese	1000 (mg/l)	100 ml	**1.19789.0100**
Manganese	1000 (mg/l)	500 ml	**1.19789.0500**
Mercury	1000 (mg/l)	100 ml	**1.70226.0100**
Mercury	1000 (mg/l)	500 ml	**1.70226.0500**
Molybdenum	1000 (mg/l)	100 ml	**1.70227.0100**
Molybdenum	1000 (mg/l)	500 ml	**1.70227.0500**
Nickel	1000 (mg/l)	100 ml	**1.19792.0100**
Nickel	1000 (mg/l)	500 ml	**1.19792.0500**
Nitrate	1000 (mg/l)	500 ml	**1.19811.0500**
Nitrite	1000 (mg/l)	500 ml	**1.19899.0500**
Palladium	1000 (mg/l)	100 ml	**1.14282.0100**
Palladium	1000 (mg/l)	500 ml	**1.14282.0500**
Phosphate	1000 (mg/l)	500 ml	**1.19898.0500**
Platinum	1000 (mg/l)	100 ml	**1.70219.0100**
Platinum	1000 (mg/l)	500 ml	**1.70219.0500**
Potassium	1000 (mg/l)	100 ml	**1.70230.0100**
Potassium	1000 (mg/l)	500 ml	**1.70230.0500**
Silicon	1000 (mg/l)	100 ml	**1.70236.0100**
Silicon	1000 (mg/l)	500 ml	**1.70236.0500**
Silicon (acid)	1000 (mg/l)	100 ml	**1.12310.0100**
Silicon (acid)	1000 (mg/l)	500 ml	**1.12310.0500**
Silver	1000 (mg/l)	100 ml	**1.19797.0100**
Silver	1000 (mg/l)	500 ml	**1.19797.0500**
Sulphate	1000 (mg/l)	500 ml	**1.19813.0500**
Tin	1000 (mg/l)	100 ml	**1.70242.0100**
Tin	1000 (mg/l)	500 ml	**1.70242.0500**
TOC acc. to EN 1484 H3	1000 (mg/l)	100 ml	**1.09017.0100**
Vanadium	1000 (mg/l)	100 ml	**1.70245.0100**
Vanadium	1000 (mg/l)	500 ml	**1.70245.0500**
Zinc	1000 (mg/l)	100 ml	**1.19806.0100**
Zinc	1000 (mg/l)	500 ml	**1.19806.0500**

* For 8 - 16 tests
** Supplied as 10x 1 litre as concentrate
*** Also for use as a standard for total hardness and residual hardness

Colorimeters, monoparameter, handheld, Checker® HC series

Hanna

Hanna pocket checkers offer a cost-effective digital alternative to visual chemical test kits. Ideal for regular water testing, swimming pool testing and for aquaculture hobbyists.

- Testing is quick and easy
- High precision results – more accurate than visual chemical test kits
- Auto shut off feature means the Checker cannot be left on by mistake
- Fully portable, fitting easily into both palm and pocket

Delivery information: Colorimeters supplied with 2 sample cuvettes, starter pack of reagents, 1 × 1,5 V AAA battery and instruction manual.

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Description	Model	Range	Pk	Cat. No.
Alkalinity for fresh water	HI-775	0 - 500 ppm	1	**705-0840**
Alkalinity for fresh water reagents for HI-775		0 - 500 ppm	25 Tests	**705-0841**
Ammonia for fresh water	HI-700	0,00 - 3,00 ppm	1	**705-0793**
Ammonia for fresh water, reagents for HI-700		0,00 - 3,00 ppm	25 Tests	**705-0794**
Ammonia HR	HI-733	0,0 - 99,9 ppm	1	**705-0826**
Ammonia HR, reagents for HI-733		0,0 - 99,9 ppm	25 Tests	**705-0827**
Ammonia MR	HI-715	0,00 - 9,99 ppm	1	**705-0809**
Ammonia MR, reagents for HI-715		0,00 - 9,99 ppm	25 Tests	**705-0810**
Bromine	HI-716	0,0 - 8,0 ppm	1	**705-0811**
Bromine, reagents for HI-716		0,0 - 8,0 ppm	25 Tests	**705-0812**
Chlorine, free	HI-701	0,00 - 2,50 ppm	1	**705-0795**
Chlorine, free, reagents for HI-701		0,00 - 2,50 ppm	25 Tests	**705-0796**
Chlorine, total	HI-711	0,00 - 3,50 ppm	1 KIT	**705-0805**
Chlorine, total, reagents for HI-711		0,00 - 3,50 ppm	25 Tests	**705-0806**
Chlorine total	HI-761	0 - 500 ppb	1	**705-0834**
Chlorine total, reagents for HI-761		0 - 500 ppb	25 Tests	**705-0835**
Chlorine UHR	HI-771	0 - 500 ppm	1	**705-0838**
Chlorine UHR, reagents for HI-771		0 - 500 ppm	25 Tests	**705-0839**
Chromium VI HR	HI-723	0 - 999 ppb	1	**705-0819**
Chromium VI HR, reagents for HI-723		0 - 999 ppb	25 Tests	**705-0820**
Chromium VI LR	HI-749	0 - 300 ppb	1	**705-0832**
Chromium VI LR, reagents for HI-749		0 - 300 ppb	25 Tests	**705-0833**
Colour	HI-727	0 - 500 PCU*	1	**705-0823**
Fluoride HR	HI-739	0,0 - 20,0 ppm	1	**705-0830**
Fluoride HR, reagents for HI-739		0,0 - 20,0 ppm	25 Tests	**705-0831**
Fluoride LR	HI-729	0,00 - 2,00 ppm	1	**705-0824**
Fluoride LR, reagents for HI-723		0,00 - 2,00 ppm	25 Tests	**705-0825**
Iodine	HI-718	0,00 - 12,5 ppm	1	**705-0815**
Iodine, reagents for HI-718		0,00 - 12,5 ppm	25 Tests	**705-0816**
Iron	HI-721	0,00 - 5,00 ppm	1	**705-0817**
Iron, reagents for HI-721		0,00 - 5,00 ppm	25	**705-0818**
Nickel HR	HI-726	0,00 - 7,00 ppm	1	**705-0821**
Nickel HR, reagents for HI-723		0,00 - 7,00 ppm	25 Tests	**705-0822**
Nitrite HR	HI-708	0 - 150 ppm	1	**705-0803**
Nitrite HR, reagents for HI-708		0 - 150 ppm	25 Tests	**705-0804**
Nitrite LR	HI-707	0 - 600 ppb	1	**705-0801**
Nitrite LR, reagents for HI-707		0 - 600 ppb	25 Tests	**705-0802**
Phosphate HR	HI-717	0,0 - 30,0 ppm	1	**705-0813**
Phosphate HR, reagents for HI-717		0,0 - 30,0 ppm	25 Tests	**705-0814**
Phosphate LR	HI-713	0,00 - 2,50 ppm	1	**705-0807**
Phosphate LR, reagents for HI-713		0,00 - 2,50 ppm	25 Tests	**705-0808**
Phosphorus ULR	HI-736	0 - 200 ppb	1 KIT	**705-0828**
Phosphorus ULR, reagents for HI-736		0 - 200 ppb	25 Tests	**705-0829**
Phosporus HR	HI-706	0,00 - 2,00 ppm	1 KIT	**705-0799**
Phosporus HR, reagents for HI-708		0,00 - 2,00 ppm	1 KIT	**705-0800**
Silica HR	HI-770	0 - 200 ppm	1	**705-0836**
Silica HR, reagents for HI-770		0 - 200 ppm	25 Tests	**705-0837**
Silica LR	HI-705	0,00 - 2,00 ppm	1	**705-0797**
Silica LR, reagents for HI-705		0,00 - 2,00 ppm	25 Tests	**705-0798**

*PCU= Platinum cobalt units

Portable colorimeters, ion specific, waterproof

Hanna

Range of microprocessor controlled, handheld, single parameter colorimeters using a monochromatic LED and chemical reagents to promote a colour change within the sample.

- Ideal for portable measurement of environmental water samples
- Accurate and repeatable measured results
- Direct reading on a LCD in g/l or mg/l or µg/l

Ordering information: Reagents and test kits are supplied separately. For full details of the complete range of Hanna portable single parameter colorimeters and reagents please contact your local VWR office.

Delivery information: Supplied with two cuvettes and two caps, 9 V battery and instruction manual.

Model	Ion selective meter
Optics	Tungsten lamp with filter and silicon photocell detector
Automatic switch-off	Yes, after 10 minutes
Power supply	9 V battery
W×D×H (mm)	192×102×67

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Weight (kg)	0,290

Description	Model	Range	Pk	Cat. No.
Aluminium meter	HI-96712	0,00 - 1,00 mg/l	1	**705-0687**
Ammonia meter	HI-96700	0,00 - 3,00 mg/l	1	**705-0683**
Ammonia meter with Cal Check®	HI-96715	0,00 - 9,99 (as NH_3-N) mg/l	1	**705-0690**
Bromine meter	HI-96716	0,00 - 8,00 mg/l	1	**705-0691**
Chlorine (free) meter with Cal Check®	HI-96701	0,00 - 5,00 mg/l	1	**705-0684**
Chlorine dioxide meter	HI-96738	0,00 - 2,00 mg/l	1	**705-0700**
Chromium VI meter LR	HI-96749	0 - 300 µg/l	1	**705-0703**
Chromium VI meter MR	HI-96723	0,00 - 1,00 mg/l	1	**705-0695**
Cyanide meter	HI-96714	0,000 - 0,200 mg/l	1	**705-0689**
Fluoride meter HR	HI-96729	0,0 - 20,0 mg/l	1	**705-0698**
Hardness (Ca) meter	HI-96720	0,00 - 2,70 mg/l	1	**705-0694**
Hardness (Mg) meter	HI-96719	0,00 - 2,00 mg/l	1	**705-0693**
Hydrazine meter	HI-96704	0 - 400 µg/l	1	**705-0685**
Iodine meter	HI-96718	0,0 - 12,5 mg/l	1	**705-0692**
Iron meter LR	HI-96746	0,00 - 1,600 mg/l	1	**705-0701**
Manganese meter LR	HI-96748	0 - 300 µg/l	1	**705-0702**
Molybdenum meter	HI-96730	0,0 - 40,0 mg/l	1	**705-0699**
Nickel meter HR	HI-96726	0,00 - 7,00 g/l	1	**705-0696**
Nitrate meter	HI-96728	0,0 - 30,0 (as NO_3-N) mg/l	1	**705-0697**
Nitrite meter with Cal Check® LR	HI-96707	0,000 - 0,600 (as NO_2-N) mg/l	1	**705-0686**
Phosphate meter LR	HI-96713	0,00 - 2,50 mg/l	1	**705-0688**
Phosphate meter with Cal Check® HR	HI-96717	0,0 - 30,0 mg/l	1	**705-0854**
Phosphorus meter with Cal Check®	HI-96706	0,0 - 15,0 mg/l	1	**705-0853**
Silver meter	HI-96737	0,000 - 1,000 mg/l	1	**705-0855**

Turbidity meters, Turbiquant®

Turbiquant® 1500T

Turbiquant® 1100T

The degree of turbidity is a measure of water quality. A liquid is cloudy if it contains undissolved suspended matter (particles, bacteria etc). These particles scatter incident light in many directions. The light scattered at 90 degrees is measured = nephelometry, i.e. nephelometry is the measurement of turbidity. The clearer a liquid, the lower the turbidity. The units of turbidity are NTU = nephelometric turbidity units. Drinking water has max. of 5 NTU, sewage more than 2000 NTU.

Turbiquant® instruments provide convincing results simply, rapidly and accurately, for all types of turbidity measurement.

For standard-compliant measurements according to EN ISO 7027 an IR LED (infrared) light source with a wavelength of 860 nm is prescribed. (IR models).
The USEPA Method 180.1 and also APHA-AWWA-WPCF require the use of a tungsten lamp emitting white light (T models).
Each Turbiquant® instrument requires the appropriate set of calibration standards for use. Must be purchased separately.

Turbiquant® 1100 IR and 1100 T instruments are portable battery powered turbidimeters for on the spot analysis

- Battery power for more than 5000 measurements
- Waterproof housing (IP 67 compliance) with easy to use 5 button operation
- Rugged carrying case

Delivery information: 1100 instrument, 2 empty cells, handy hints, manual, carrying case, 4 batteries.

Turbiquant® 1500 IR and 1500T instruments - ideal for routine laboratory work

- Easy to use
- Automatically selects relevant resolution
- Optional pour-through assembly for high sample throughput

Delivery information: 1500 instrument, universal power supply/plug, 3 empty cells, handy hints, manual.

Turbiquant® 3000 IR and 3000T instruments - give total flexibility

Same specifications as 1500 model plus the following features:

- Wider range - up to 10 000 NTU
- 4 detectors give nephelometric and ratio measurements
- Transmission measurements above 40 FAU according to ISO EN 7027
- Optional flow-through assembly

Delivery information: 3000 instrument, universal power supply/plug, 3 empty cells, handy hints, manual.

Primary (USEPA method) and Secondary (ISO) Calibration Standards

AMCO-AEPA-1® Microspheres are primary calibration standards that conform with USEPA method 180.1. In compliance with EN ISO 7027 these standards count as alternative secondary standards to freshly prepared formazine.

- Improved precision
- Ready to use and non toxic

Model	Turbiquant® 1100 IR	Turbiquant® 1100 T	Turbiquant® 1500 IR	Turbiquant® 1500 T	Turbiquant® 3000 IR	Turbiquant® 3000 T
Light source	IR-LED	Tungsten-halogen lamp	IR-LED	Tungsten-halogen lamp	IR-LED	Tungsten-halogen lamp
Measurement units	NTU, FNU		NTU		NTU, FNU, FAU, EBC	NTU, EBC, Nephelos
Range	0,01 - 1100 NTU		0 - 1000 NTU		0 - 10000 NTU; 0 - 10000 FNU; 0 - 10000 FAU; 0 - 2450 EBC	
Accuracy	±2% or ± last decimal place NTU (0 - 500 NTU); ±3% of measured value (500 - 1100 NTU)		±2% of measured value or ±0,01 NTU whichever is larger in the range 0 - 1000 NTU		±2% of reading or ±0,01 NTU whichever is larger in the range 0 - 1000 NTU; ±5% of reading for range 1000 - 4000 NTU; ±10% of reading for range 4000 - 10000 NTU	
Reproducibility	-		< ±1% of measured value or ±0,01 NTU, whichever is the larger			
Resolution	0,01/0,1/1 depending on measurement range				Selectable 0,1 - 0,0001 NTU. 0,0001/0,001/0,01/0,1 depending on measurement range	
Cuvettes (Ø×H mm)	25×45		28×70 or optional pour-through assembly		28×70 or continuous flow cells	
Sample volume (ml)	15		25			
Time/calendar	None		Integrated			
Calibration	Automatic 1 - 3 point				Automatic 1 - 4 point (to 1750 NTU), 10000 NTU selectable	

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Compliance	EN ISO 7027	USEPA method 180.1	EN ISO 7027	USEPA method 180.1	EN ISO 7027	USEPA method 180.1
GLP-Functions	None		Control of calibration intervals, self-test		Control of calibration intervals, self-test, calibration and instrument configuration are access code protected	
Certification	CE		CE, UL TUV,-GS			
Interfaces	None		RS232 uni-directional		RS232 bi-directional	
Power supply	4× AAA batteries		Universal charger/plug			

Description	Pk	Cat. No.
Instruments		
Turbiquant® 1100 IR, portable turbidimeter	1	**1.18324.0001**
Turbiquant® 1100 T, portable turbidimeter	1	**1.18325.0001**
Turbiquant® 1500 IR, turbidimeter	1	**1.18330.0001**
Turbiquant® 1500 T, turbidimeter	1	**1.18331.0001**
Turbiquant® 3000 IR, turbidimeter	1	**1.18332.0001**
Turbiquant® 3000 T, turbidimeter	1	**1.18333.0001**

Description	Pk	Cat. No.
Calibration standards for Turbiquant®		
Calibration set for Turbiquant® 1000 IR (0,02 - 10,0 - 100 - 1000 NTU)	4 Vial	**1.18327.0001**
Calibration standard set for Turbiquant® 1500 IR/1500 T (0,02 - 10,0 - 1000 NTU)	3 Vial	**1.18328.0001**
Calibration standard set for Turbiquant® 3000 IR (0,02 - 10,00 - 100,0 - 1750 NTU)	4 Vial	**1.18329.0001**
Calibration standard set for Turbiquant® 1100 IR/1100 T (0,02 - 10,0 - 1000 NTU)	3 Vial	**1.18335.0001**
Calibration standard (10000 NTU) for Turbiquant® 3000 IR	1	**1.18342.0001**
Calibration standard (10000 NTU) for Turbiquant® 3000 T	1	**1.18343.0001**
Calibration standard set for Turbiquant® 3000 T (0,02 - 10,0 - 100,0 - 1750 NTU)	4 Vial	**1.18349.0001**
Accessories		
Empty cuvettes (3) for Turbiquant® 1000/1100	3	**1.18320.0001**
Empty cuvettes (3) for Turbiquant® 1500/3000	3	**1.18336.0001**
Flow-through assembly for Turbiquant® 3000	1	**1.18341.0001**
Lamp, tungsten for Turbiquant® 1500 T/3000 T	1	**1.18338.0001**
Lamp, LED for Turbiquant®1500 IR	1	**1.18344.0001**
Lamp, LED for Turbiquant®3000 IR	1	**1.18382.0001**

Turbidity meters, portable HI 93703

Hanna

Compact meters, using the nephelometric method of measurement, which have a large LCD and rubberised keyboard for field and laboratory use. The HI 93703 meter features a dual measurement range for drinking and wastewater applications, together with automatic calibration using two calibration standards at 0 and 10FTU. For traceability, the date of the last calibration can be displayed.

- Quick and accurate response
- Auto shut off after 5 minutes to conserve batteries
- Rugged and portable with easy to read display
- Calibration standards are non toxic, disposable, ready-to-use alternatives to formazine

Conform to ISO 7027

Delivery information: HI 93703C set is supplied as a turbidity meter in attaché case with cuvettes, AMCO-EPA-1 (primary standards) calibration solutions at 0 FTU and 10 FTUs, cuvette cleaning solution, lint free tissues and 4x AA batteries.
The HI 93703 meter is supplied with a glass cuvette, batteries and instructions

Accuracy	±0.5% FTU* or ±5% of reading %
Batteries	4 x 1.5 V AA
Calibration	Automatic at 0 and 10 FTU*
Light power source	Silicon photocell
Light source	LED
Range	0.0 to 50 FTU* 50 to 1000 FTU* (auto ranging)
Resolution	0.01 and 1 FTU*
Weight (g)	510
W×D×H (mm)	220×82×66

Description	Pk	Cat. No.
Turbidity meter HI 93703	1	**705-0786**
Turbidity meter HI 93703C	1	**715-2008**

Description	Pk	Cat. No.
Accessories		
Cleaning solution for cuvettes	230 ml	**705-0844**
Cell measurement kit for honey (approx 75 tests). Kit includes 82 square section cuvettes, glycerol 30 ml and 2×5 ml syringes	1 KIT	**635-0659**
Standard reference, glycerol (30 ml bottles)	4	**635-0660**

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Description	Pk	Cat. No.
Accessories		
Turbidity calibration solution, non toxic, stable, produced according to the AMCO AEPA-1 standards at 0 FTU	30 ml	**705-0842**
Turbidity calibration solution, non toxic, stable, produced according to the AMCO AEPA-1 standards at 10 FTU	30 ml	**705-0843**
Turbidity calibration solution, non toxic, stable, produced according to the AMCO AEPA-1 standards at 500 FTU	30 ml	**665-0151**

*1FTU =1NTU

Turbidity and chlorine meter, portable, HI 93414

Hanna

Designed for water quality measurements, HI 93414 provides reliable and accurate readings on low level turbidity and chlorine samples. HI 93414 features a tungsten light source that is EPA compliant for turbidity measurement. The instrument also features HANNA's exclusive Fast Tracker Tag Identification System™ for simple, organised data management as well as chlorine CAL Check™ calibration validation.

- Reduces stray light and helps achieve high accuracy at low ranges
- USB and RS232 PC connectivity for easy download of data
- Backlit LCD with user friendly display and guidance codes
- GLP functions allow traceability of calibration conditions including the time, date and last calibration points

Delivery information: The HI 93414 is supplied complete with 5 sample cuvettes and caps; calibration cuvettes for turbidimeter and colorimeter, silicone oil; cleaning tissues; 5 Tag holders with Tags; scissors, 4× AA batteries; AC adapter; instruction manual; instrument quality certificate and rigid carrying case.

Model	HI 93414
Light source	Tungsten lamp
Detector	Silicon photocell
Range	0,0 to 5,00 mg/l free chlorine 0,0 to 5,00 mg/l total chlorine 0,0 to 9,99 NTU 10,0 to 99,9 NTU 100 to 1000 NTU
Accuracy	±0,02 mg/l @ 1,00 mg/l
Accuracy turbidity	2% of reading plus 0,02 NTU
Calibration	2, 3 or 4 point (turbidity) 1 point (chlorine)
Interfaces	RS232 and USB 1.1
W×D×H (mm)	87×224×77
Weight (g)	512

Description	Pk	Cat. No.
HI 93414 portable turbidity and chlorine meter	1	**705-0645**

Description	Pk	Cat. No.
Accessories		
Cleaning tissues for cuvettes	4	**705-0646**
Glass cuvettes	4	**705-0649**
Windows compatible software (compatible with Windows 7 but not Windows Vista)	1	**662-4018**

Portable photometers, pHotoFlex® series

WTW

A practical and robust series of portable photometers, suitable for a wide range of photometry, turbidity and pH applications in the areas of environmental monitoring, water treatment, wine and beverage industries and process control.The pHotoFLex® series offers more than 120 methods for commercial test kits and option for 100 user-defined programs. Other features include a backlit display with automatic switch off. The PhotoFlex STD has 160 methods for commercial test kits with 10 user-defined programs.

- Able to accommodate 16 mm (variable height) and 28 mm cuvettes by means of a fixed adapter
- User guidance via display for easy operation without handbook
- Integrated pH measurement with automatic temperature compensation (except STD model)
- Turbidity measurement with infrared light source according to DIN 27027/ISO 7027 for 665-0169
- Battery operation with four AA batteries for approximately 3000 measurements

LabStation LS Flex

A LabStation, that upgrades either the pHotoFlex® or pHotoFlex® Turb instruments into a small laboratory instrument, comprises a rechargeable battery pack (RB Flex) and LSdata software package. Routine measurements can be set via bar code and carried out without zero adjusting and therefore input of user-defined methods through the PC is simplified. For connection of the LabStation to a PC, an AK cable is required.

Delivery information: The pHotoFlex®/Set includes the pHotoFlex portable photometer with pH in a field case with tray to hold instruments and accessories.
The pHotoFlex® Turb/SET includes the pHotoFlex portable photometer with integrated turbidity and pH function in a field case with appropriate accessories.

Model	pHotoFlex® STD	pHotoFlex®	pHotoFlex® Turb	pHotoFlex®
Light source	LED			
Wavelengths (nm)	436, 517, 557, 594, 610, 690		436, 517, 557, 594, 610, 690, 860	436, 517, 557, 594, 610, 690
Photometric accuracy	<2 nm /0,005 A reproducibility			
Datalog - capacity (sets)	100 data sets	1000 data sets		
Accuracy turbidity	-		0,01 NTU/FNU or ±2% of the measured value	-
pH - accuracy	-	±0,01		
Interfaces	RS232, USB via adapter (optional)			

Description	Pk	Cat. No.
Portable photometer pHotoFlex® STD	1	**705-0765**
Portable photometer with pH, pHotoFlex®	1	**665-0168**
Portable photometer with pH and turbidity, pHotoFlex® Turb	1	**665-0169**
Portable photometer with pH and turbidity, pHotoFlex® Turb/SET	1 KIT	**665-0187**
pHotoFlex®/Set	1 KIT	**705-0562**

Description	Pk	Cat. No.
Accessories		
Rechargeable battery set (RB Flex/430)	1	**665-0170**
LabStation (LSFlex/430)	1	**665-0171**
Field case with tray for all pHotoFlex/Turb 430 models	1	**705-1026**

Chlorine analysers, ChloroSense®

Reagent-free chlorine measurement

The ChloroSense® is a reagent-free, operator independent method for determining free and total chlorine in less than 1 minute. The unique patented electrochemical sensor delivers fast and accurate results over an extensive range. ChloroSense® is a genuine alternative to the standard DPD method and is highly effective across many different application areas. Although designed for the highly regulated drinking water industry, the ChloroSense® kit has been adopted in other applications requiring chlorine measurement including washing of food produce, testing of potable water storage tanks, pipe refurbishment and various applications in hospitals.

- Waterproof IP 67, rugged and portable
- Reads up to 100 mg/l - ppm total chlorine
- Unique sensor technology: No reagents required and therefore no chemical waste for disposal
- Simultaneous measurement of free and total chlorine
- 55 seconds measurement time, including sample temperature

Delivery information: Supplied with 100 electrodes, calibration chip, sample bottles and soft carry case.

Measuring range	0,02 - 10 mg/l free chlorine; 0,05 - 100 mg/l total chlorine
Resolution	0,01 mg/l at 1 mg/l free chlorine; 0,1 mg/l at 10 mg/l total chlorine
Measurement time	55 s
Measuring range - temperature (°C)	2 - 40 (instrument); 2 - 25 (sample)
Temperature resolution (°C)	0,1

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Display	Graphical LCD, 42×22 mm
Interfaces	Waterproof USB
Power	4× AA, optional power via USB port of computer or optional mains adapter
W×D×H (mm)	170×26×116
Weight (g)	975

Description	Pk	Cat. No.
ChloroSense, chlorine analyser kit	1 KIT	**705-0650**

Description	Pk	Cat. No.
Accessories		
ChloroSense®, replacement electrodes, pack of 100 with calibration chip	100	**705-0651**
ChloroSense® check standards	1 SET	**705-0652**
USB cable for ChloroSense®	1	**705-0653**

Scanning analysers for copper and lead, SA1100

A successor to SA-1000, the SA1100 provides simple and reliable monitoring for lead and copper in water using the long established voltammetric method. The lightweight instrument is waterproof and suitable for any environment. The USB port, once connected to a PC, can be used to access data stored in the instrument log, or to upgrade the instrument software.

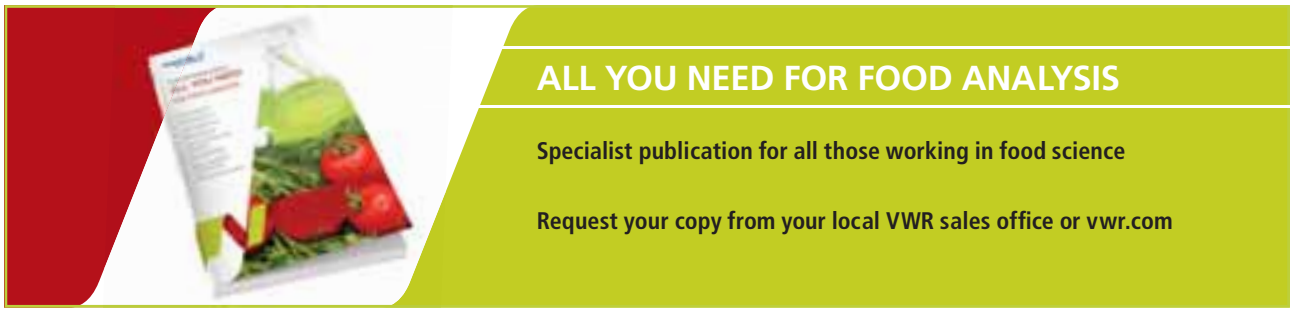
The unit is simple to use. Fill the sample container, then add the buffer reagent and insert the disposable sensor, close the lid and the unit automatically carries out the analysis.

- Rapid results reported in µg/l for Copper or lead
- Data logging
- Battery power saving system with auto switch-off after five minutes
- No user calibration required

Delivery information: Supplied as a kit containing the SA1100 instrument, calibration chip, instructions and a consumables pack for ten analyses all in a soft-sided carrying case.

Model	PT430	PT431
Measuring principle	Fixed voltage potentiostat	
Range	Lead: 2 - 100 µg/l	Copper: 50 - 2000 µg/l
Resolution	1 µg/l	
Measurement time	Lead: 3 minutes	Copper: 30 seconds or 3 minutes for drinking water
Sample requirements - temperature (°C)	15 - 30	
Display	Backlit, graphical LCD (42×22 mm), with six language options and direct-reading of results in µg/l	
Data logging - capacity	Stores 500 previous readings and offers prompts when only 40 and 20 left available	
User interface	Set time and date, date format, display language and reset sample number	
Interfaces	Waterproof USB connection to PC	
Power	4×1,5 V 'AA' alkaline batteries. Powered via USB port when connected to computer	4×AA alkaline batteries. Powered via USB port when connected to computer
W×D×H (mm)	170×126×116	
Weight (g)	975	

Description	Pk	Cat. No.
SA1100, PT430 water testing kit for lead	1 KIT	**705-0660**
SA1100, PT431 water testing kit for copper	1 KIT	**705-0661**



B.O.D. measurement, BOD EVO Sensor System 6
VELP Scientifica

Respirometric measurement system for BOD without mercury for determining the amount of dissolved oxygen consumed by aerobic biological microorganisms in water.

The sensor uses manometric technology and microprocessor control to provide regular data measurements over defined periods. The sensors require 2 lithium batteries each and are IP 54 rated. Using the Wireless Databox™ and BODSoft™, the data from up to 80 samples can be monitored, compared and and stored.

- Very simple to use and mercury-free
- Real time data (in ppm BOD) is displayed on the sensor head of each bottle
- Using wireless data transmission 5-day test can record results every 30 minutes up to every 24 hours
- 6 sample bottles with a magnetic stirring station for ensuring reproducibility
- Measurement ranges: 90/250/600/999 ppm BOD

Temperature control is usually required for the most reproducible results - please see entries for thermostatic cabinets and incubators which are supplied separately.

Delivery information: The BOD EVO Sensor systems include a 6-position stirring station with BOD sensors, dark glass sample bottles, alkali holders and stirring bars.

Description	Pk	Cat. No.
BOD EVO Sensor System 6 (230 V) including Wireless Databox™, BODSoft™ and cable	1	**705-0779**
BOD EVO Sensor System 6 (230 V)	1	**705-0780**

Description	Pk	Cat. No.
Accessories		
Potassium hydroxide trap for BOD sensor	1	**705-0845**
Control test tablets, pack of 8	1	**705-0782**
Magnetic stirrer 6 place for BOD systems	1	**705-0846**
Dark glass bottle 500 ml for BOD systems	1	**705-0781**

BOD measurement, OxiTop® IS6, IS12, IS12-6
WTW

Oxitop® IS 6

Oxitop® IS 12

BOD respirometric measurement without mercury (Hg) according to EN 1889-2 for auto-control

The OxiTop® system was designed for the measurement of BOD from wastewater samples that are not highly contaminated, by measurement of the decrease of oxygen pressure and absorption of CO_2 generated in the sample bottle by NaOH.

- Very simple to use and mercury-free
- Recorded values can be memorised for up to five days or viewed instantaneously on the numerical display
- 6 and 12 sample bottle versions available
- Measurement ranges: 0...40/80/200/400/800/2000/4000 mg/l BOD
- Auto Temp function - if the sample is too cold, the start of the measurement is delayed

To be used in conjunction with a magnetic stirrer platform and a thermostatic cabinet.

Delivery information: The IS sets include the ready to use package of sample bottles, stirrer platform and stirrer bars, stirrer bar retriever, rubber sleeves, NaOH pellets, 1 each of overflow measuring flask 164 ml and 432 ml, nitrification inhibitor (thermostatic cabinet not included).

OxiTop® IS12-6

IS12-6 set is a ready to use package for 6 simultaneous measurements (extendable to 12) with an IS Inductive stirring system for 12 places, and 6 OxiTop® heads and accessories as above.

Description	Pk	Cat. No.
OxiTop® IS6	1	**705-1002**
OxiTop® IS12	1	**705-1003**
OxiTop® IS12-6	1	**705-1004**

BOD measurement, OxiTop® Control 6/12
WTW

The automated system for measuring BOD, OxiTop® Control, consists of an OxiTop® Control measuring head and an infrared controller. This system is exceptionally easy to use. The controller is capable of configuring up to 100 measuring heads and receiving the measurement data via infrared transmission. Each sample is easily identified and recognised by the controller thanks to the measuring head, each of which is associated with a unique serial number. The controller is multilingual to make it as easy as possible to operate. The digital display is clear and offers step by step guidance for all user operations.

Benefits:

- Standard and routine measurements of 6 or 12 samples in parallel with automatic data transfer
- Controller has a range of between 0...40/80/200/400/800/2000/4000 mg/l BOD
- Automatic assignment of a sample identification number
- Measurement period: 0,5 h to 99 days
- Heads can store up to 360 data sets

OxiTop® Control 6

Complete package for 6 simultaneous measurements with OxiTop® OC 100 Controller, and IS 6 Inductive Stirring System for mains operation 230 V/50/60 Hz and 6 OxiTop® C measuring heads and appropriate standard accessories.

OxiTop® Control 12

Complete package for 12 simultaneous measurements with OxiTop® OC 100 Controller, and IS 12 Inductive Stirring System for mains operation 230 V/50/60 Hz and 12 OxiTop® C measuring heads and appropriate standard accessories.

Delivery information: Delivered with brown sample bottles, stirrer bars, stirrer bar retriever, rubber sleeves, NaOH pellets, 1 each of overflow measuring flask 164 ml and 432 ml, nitrification inhibitor.

Description	Pk	Cat. No.
OxiTop® Control 6	1	**705-1000**
OxiTop® Control 12	1	**705-1001**

Measurement of biodegradability, OxiTop® control A6/A12 and OxiTop® control S6/S12
WTW

Biodegradability according to ISO 9408/ DIN EN 29 408/ OECD 301 F

The determination of the biodegradability should be checked before "new" chemicals are used for the first time, not only for environmental reasons but also to minimise disposal charges. The samples are prepared according to the instructions and blanks are stirred at a constant temperature for 28 days in closed bottles. The CO_2 produced is removed from the gas space by means of an absorber so that the resulting negative pressure is a measure of the biodegradability. The continuous recording of the values in the OxiTop®-C means that the required documentation can be guaranteed in an optimal manner.

- The measuring bottles and adapters can be autoclaved at 121 °C
- Controller has a range of between 500 - 1350 hPa
- The head flashes for 5 seconds when accessed by controller

Delivery information: The A6/S6 and A12/S12 include the ready to use package of sample bottles and adapters, stirrer platform (IS 6 Var for A6) and stirrers, OxiTop®-C heads, OC110 controller, Achat OC software, with appropriate accessories (thermostatic cabinet not included).

Description	Pk	Cat. No.
OxiTop® Control A6 (6×1000 ml bottles)	1	**705-1005**
OxiTop® Control A12 (12×250 ml bottles)	1	**705-1006**

Determination of anaerobic degradation processes, OxiTop® control AN 6/AN 12
WTW

Measurement of aneaerobic degradation, OxiTop® AN6, AN12, and biogas determination

Anaerobic degradation processes take place in the absence of oxygen. In order to be able to fill the gas space above the sample with inert gas the measuring bottle has side-mounted connections, which are sealed with septa. When anaerobic degradation has taken place the dissolved CO_2 can be driven off and then removed from the gas space by means of a CO_2 absorber. The resulting pressure difference is proportional to the CO_2 concentration, the remaining over-pressure is proportional to the methane concentration. The degradation process can be comfortably followed in the "pressure" operating mode.

- Controller has a range of between 500 - 1350 hPa
- The head flashes for 5 seconds when accessed by controller

Delivery information: The AN sets include the ready to use package of sample bottles and adapters, stirrer platform and stirrers, OxiTop® Control heads, OC110 controller, Achat OC software, with appropriate accessories (thermostatic cabinet not included).

Description	Pk	Cat. No.
OxiTop® Control AN 6	1	**705-1007**
OxiTop® Control AN 12	1	**705-1008**

Determination of soil respiration, OxiTop® control B6/B6M
WTW

Control B6

Laboratory method for determining the microbial soil respiration according to DIN 19 737

Soil respiration measurements are used for forecasting, surveying and checking remediation work, for biodegradability measurements of substances (pesticides, fungicides, fertilisers etc.) as well as carrying out toxicity tests. This determination is possible with the OxiTop® Control System and special practically tested measuring vessels in a very accurate, simple and economical way.

Soil respiration measurements can be carried out in two different types of vessel. For actively respiring soils with strong CO_2 development, the MG1.0 measuring vessel is recommended with its large opening (~100 mm Ø) means that it can easily be used with large volume CO_2 absorber vessels for subsequent quantitative CO_2 determination.

- Simple and precise
- Cost effective
- The measuring bottles and adapters can be autoclaved at 121 °C
- Controller has a range of between 500 - 1350 hPa
- The head flashes for five seconds when accessed by controller

Description	Pk	Cat. No.
OxiTop® Control B6 package for 6 places with 6 flasks PF45/500 (DURAN® borosilicate glass) and 6 OxiTop®AD/SK adapters, autoclavable	1	**705-1009**
OxiTop® Control B6M package for 6 places with 6 flasks MG 1,0 1000 ml with stopper adapters for OxiTop® Control	1	**705-1010**

BOD measurement, accessories for OxiTop® and OxiTop® Control
WTW

The green OxiTop® heads are suitable for more corrosive or aggressive gas such as methane from bio-reactors.

Description	Pk	Cat. No.
OxiTop® heads		
OxiTop® head, replacement (yellow)	1	**662-0420**
OxiTop® head, replacement (green)	1	**662-0421**
OxiTop®-2 heads, replacement (1x yellow + 1x green)	1 SET	**705-1019**
OxiTop®-6 heads, replacement (3x yellow + 3x green)	1 SET	**705-1018**
OxiTop®-10 heads, replacement (5x yellow + 5x green)	1	**715-3012**
OxiTop® set-2 upgrade kit for 2 heads	1	**701-0050**
OxiTop® set-6 upgrade kit for 6 heads	1	**705-0557**

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Description	Pk	Cat. No.
OxiTop® Control heads and accessories		
OxiTop® Control head, replacement	1	**715-3029**
OxiTop® Control 2 heads, replacements	2	**701-0051**
OxiTop® Control 6 heads, replacements	6	**705-1020**
Software Achat OC for OxiTop® Control	1	**705-1021**
Interface cable to PC AK-540/B	1	**705-0407**
General accessories		
OxiTop® PM, calibration tablets (8 tablets)	1	**705-0405**
Nitrification inhibitor	25 ml	**705-1022**
OxiTop® PT for under pressure and leakage testing	1	**705-0406**
Batteries for all OxiTop® heads	2	**662-0422**
OxiTop® adapter AD/SK	1	**701-0052**
Overflow measuring flask, 97 ml	1	**701-0055**
Overflow measuring flask, 164 ml	1	**701-0056**
Overflow measuring flask, 250 ml	1	**701-0057**
Overflow measuring flask, 432 ml	1	**701-0058**
PF 600 sample bottle, 510 ml, amber	1	**701-0059**
Sample bottle PF45/1000	1	**701-0060**
Bottle MF 45/1000 ml, 2 side connectors	1	**701-0061**
Stirrer bars RST-600	1	**701-0062**
Rubber insert GK 600 L	1	**701-0063**

Thermostatic container, Oxitop® Box
WTW

Bench top container with a hinged transparent cover which can accommodate a maximum of either 12 OxiTop® simultaneous measurements or 20 Karlsruhe bottles. The compressor is CFC free and has an automatic defrosting system with condensate evaporation.

- Temperature is fixed at 20 °C ±0,5 °C
- Cross flow fan ensures uniform temperature distribution
- Connection for an IS 6 or IS12 stirrer

H×W×D: 375×425×600 mm

Description	Pk	Cat. No.
OxiTop® Box, 375×425×600 mm	1	**705-1017**

Thermostatic cabinets with variable temperature
WTW

- Radial ventilation with forced air circulation
- Internal plug sockets 240 V/50 Hz (for stirrers)
- Variable temperature range +10 to 40 °C ±1 °C for diverse applications

- BOD at 20 °C

- Enzymatic activity at 25 °C

- Microbiology at 37 °C

Type	Inner volume (l)	W×D×H ext. (mm)	Pk	Cat. No.
TS 606/2-i for 2× OxiTop® 12, 180 litre	180	600×602×850	1	**705-1011**
TS 606-G/2-i for 2× OxiTop® 12, 180 litre, with glass door	180	600×602×850	1	**705-1012**
TS 606/4-i for 4× OxiTop® 12, 360 litre	360	600×602×1589	1	**705-1014**
TS 606-G/4-i for 4× OxiTop® 12, 360 litre, with glass door	360	600×602×1589	1	**705-1015**
TS 1006, 500 litre (wide spaced shelves)	500	715×755×1515	1	**705-1016**

BOD bottles

Glass, clear

BOD bottles (Biological Oxygen Demand), have glass peg stoppers adjusted to leave a 'well' for water seal and a pointed cone to prevent air entrapment.

Description	Pk	Cat. No.
BOD bottles, 250 ml	10	**215-1070**
BOD bottles, 500 ml	10	**215-1071**

Flow meter with telescopic handle

WTW

Convenient impeller type meters for measuring current and flow in surface water and open flumes. Exchangeable splash-proof microcomputer in the handle, displays the readings and records data.

- Lightweight, graduated telescopic handle
- Robust design, impeller in protective housing to avoid damage by stones or flotsam
- Easy to use control for display and memory modes
- Five year battery lifetime

Delivery information: Supplied with carrying case.

Model	Flow rate	Accuracy (%)	Length (m)	Pk	Cat. No.
CP-1	0,1 - 6,1 m/s	0,03 m/s	0,9 - 1,8	1	**705-0654**
CP-2	0,1 - 6,1 m/s	0,03 m/s	1,5 - 4,5	1	**705-0655**

Flocculators
VELP Scientifica

FC6S

FP4

JLT4

A range of flocculator instruments to support technicians working in the environmental sector. The multiple place stirring provides more accurate data and reproducible results.

- Timer function for FP4 and JLT units
- Stainless steel stirring rods are adjustable in height
- Strong metallic frame, epoxy coated for protection against chemical and mechanical corrosion

Portable unit FP4

The FP4 has 4 stirrers with reproducible stirring speeds allowing standard conditions to be met during on-site analysis. Central illumination of the 4 positions.

JLT units

Digital control with the same stirring speed and time for each of the 4 or 6 positions. Samples can be illuminated (or not) by lighting on the back panel.

FC S units

Speed settings for each position can be independently selected. Samples can be illuminated (or not) by lighting on the back panel.

Model	FP4	JLT 4	JLT 6	FC4S	FC6S
Stirring places	4		6	4 independent control	6 independent control
Stirring speed (min^{-1})	20 - 40 - 50 - 100 - 200	10 - 300		10 - 15 - 30 - 45 - 60 - 90 -120 - 150 - 200	
Timer (min)	0 - 30 minutes or continuous	0 - 999 minutes or 0 - 99 hours or continuous		-	
Display	-	2×LED			
Controls keypad	Analogue	Digital		Analogue	
W×D×H (mm)	250×250×320	645×260×347	935×260×347	645×260×347	935×260×347
Weight (kg)	4,8	13	17	12,5	18

Description	Pk	Cat. No.
FP4	1	**705-1500**
JLT 4	1	**705-1501**
JLT 6	1	**705-1502**
FC4S	1	**705-1503**
FC6S	1	**705-1504**

Description	Pk	Cat. No.
Accessories		
Transport bag for FP4 flocculator	1	**705-1505**

Flocculators, SW5 and SW6
Stuart

SW5

SW6

Designed for flocculation tests on water and effluent samples

The SW6 is specifically designed for repeatable conditions between samples and from run to run. Two preset programmes allow routine speed and time

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parameters to be input and then selected by simply pressing one button. The intuitive touch sensitive keypad is totally flat for easy cleaning. Sample monitoring is assisted by base illumination against a black background.

- Continuously variable stirring speed
- Digital indication of time and speed
- Two pre-set programmes
- Built in illumination for easy viewing of samples
- Timer feature controls stirring time and measures settling time

The SW5 is a mini-version of the SW6 that accepts only two samples and is does not include the timer function.

Ordering information: Beakers need to be ordered separately.

Model	SW5	SW6
Stirring places	2	6
Stirring speed (min^{-1})	25 - 250	
Preset programmes	2	
Timer (min)	none	0 - 99
Display	LCD	LED
Controls keypad	Dial	Touch sensitive
W×D×H (mm)	320×210×500	750×210×460
Weight (kg)	8,6	17

Description	Pk	Cat. No.
Flocculator SW5, with 2 rotators	1	**709-0101**
Flocculator SW6, with 6 rotators	1	**715-5901**

Description	Capacity (ml)	Height (mm)	Ø ext. (mm)	Pk	Cat. No.
Beakers, tall form					
Beaker, tall form, graduated, with spout	1000	180	95	10	**213-0037**
Accessories					
Simultaneous coagulant doser for SW6 only				1	**709-0100**

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Digital refractometers for sugar analysis
Hanna

Quick and easy to use, these portable refractometers with yellow LED light source are ideal for analysing the sugar content in a wide range of food products including fruit, energy drinks, puddings, tofu, jams, honey, soups and sauces.

- Direct readout of °Brix and °C with automatic temperature compensation feature
- Easy clean sample well - stainless steel ring and flint glass prism
- Large clear LCD display with water resistant IP 65 casing
- Calibrate to zero using pure water
- Battery operated with auto shut-off after 3 minutes

Delivery information: Supplied with 9 V battery and instruction manual.

Model	HI 96801	HI 96802	HI 96803	HI 96804
Sample size (ml)	2 drops			
Response time	1,5 seconds			
Scales - Brix	0 - 85			
Accuracy (°Brix)	±0,2			
Resolution	0,1 °Brix / 0,1 °C			
Operating temperature range (°C)	0...80			
Temperature compensation range (°C)	10...40			
W×D×H (mm)	192×104×89			
Weight (g)	420			

Description	Pk	Cat. No.
HI 96801, digital refractometer for sucrose analysis in food industry	1	**635-0661**
HI 96802, digital refractometer for fructose analysis in food industry	1	**635-0662**
HI 96803, digital refractometer for glucose analysis in food industry	1	**635-0663**
HI 96804, digital refractometer for invert sugar analysis in food industry	1	**635-0664**

Cooking oil tester
Testo

A tester for quantitative measurement of the deterioration (with use) of cooking oils in deep fat fryers. The capacitative oil sensor measures the oxidative breakdown of the oils as the Total Polar Materials (% TPM).

- Measurement directly in the deep fat fryer at elevated temperatures
- Results in % TPM in 30 seconds with automatic recognition of measurement end
- Audible and visual alarm function with 2 limit values (user defined)
- Sensor simply wiped clean, thanks to protective layer
- No requirement for sensor to cool down between measurements

Model	Testo 270
Accuracy (%)	±2 TPM (40 - 190 °C) at 25 °C (ambient)
Accuracy (°C)	±1,5
Batteries	2×AA
Housing type	ABS with removable TopSafe protective cover
Measurement parameter	Total polar materials (% TPM) Temperature (°C)
Measurement ranges	0,5 - 40% TPM 40 - 200 °C
Operating temperature range (°C)	0 to 50
Weight (with battery)	164 g
W×D×H (mm)	50×20×354

Description	Pk	Cat. No.
Testo 270 cooking oil tester in aluminium carry case, TopSafe protective cover, hand strap, reference oil, batteries and instruction manual	1	**620-1900**

Reagents for the determination of rancidity of fats, Fritest® and Oxifrit®

Fritest® test kit includes reagents and accessories for evaluating the degree of deterioration of vegetable fats used for deep-frying in kitchens and bakeries. Method used is based on colorimetry of fats exposed to heat using the alkali colour count principle.

Oxifrit® test kit determines the content of polar, petroleum ether, insoluble oxidised fatty acids in cooking oil and fat by a colorimetric method based on an acid-base indicator.

Description	Pk	Cat. No.
Fritest®, method: colorimetric, alkali colour count principle	60 Tests	**1.10652.0001**
Fritest®, refill pack for 1.10652.0001	30 Tests	**1.10651.0001**
Oxifrit-Test®, method: colorimetric, determination of oxidised fatty acids	60 Tests	**1.10653.0001**
Oxifrit-Test®, refill pack for 1.10653.0001	30 Tests	**1.10654.0001**

Reagent kits for protein and fibre analysis

Simple reagent kits, used in food analysis, that use colour chemistry to determine levels of protein and fibre. Please note these kits require the use of a photometer or spectrophotometer.

Description	Pk	Cat. No.
Protein (Bradford Method at 595 nm), reagent solution for approx. 200 determinations	500 ml	**1.10306.0500**
Protein (Biuret Method at 546 nm), reagent solution for approx. 250 determinations	500 ml	**1.10307.0500**
Carrez Clarification	1 KIT	**1.10537.0001**
Total dietary fibre, enzymatic/gravimetric method	100 Tests	**1.12979.0001**

Butyrometers, Gerber type

Soda glass, clear

Butyrometers are used to determine the fat content of dairy samples. The product is treated with concentrated sulphuric acid to disrupt the emulsion. The resulting mixture is centrifuged in the butyrometer and the fat content read directly off the scale.

Description	Pk	Cat. No.
Conforms with BS 696		
Butyrometer for cheese 3 g 0 - 40% : 1%	1	**614-1572**
Butyrometer for cream 5 g 0 - 70% : 1%	1	**614-1573**
Butyrometer for skim milk 0 - 4% : 0,1%, 10,94 ml	1	**614-1574**
Butyrometer for milk 0 - 8% : 0,1%, 10,94 ml	1	**614-1575**
Butyrometer for double quantity skim milk 0 - 0,5% :0,02%, 21,88 ml	1	**614-1576**
Conforms with Irish standards		
Butyrometer IS68 for cream, 5 g, 0 - 70% : 1%	1	**614-1570**
Butyrometer IS66 for milk 0 - 8% : 0,1%, 10,8 ml	1	**614-1571**

Description	Pk	Cat. No.
Accessories		
Lockstopper for butyrometers, rubber, brass rim	10	**619-0200**

Titrators, food & beverage, TitraLab® pH/Total Acidity

Hach Lange

These automatic potentiometric titration analysers are specifically designed to determine pH and total acidity in a variety of food and beverage applications, providing a compact and reliable solution for routine QC analysis measurements.

- Integrated high resolution 40 000 steps electronic burette delivers dependably accurate results
- Intuitive product interface, ready to use, pre-programmed methods and preset display provide ease of use
- Automatic buffer recognition (pH 2,00/4,01/7,00/9,21/10,90; at 25 °C)
- One, two or three-point calibration
- "All-included" application pack including electrode and accessories (excluding reagents)
- RS232C interface enables communication with a computer or printer

Ordering information: Supplied with combined pH electrode with cable, 10 ml syringe with plunger, titration stand holder including magnetic stirrer, 10 titration cells (50 ml, Ø 30 mm) and power supply. Chemicals need to be ordered separately.

Application	Reagent
pH & Total Acidity in milk	NaOH 0,1M
pH & Total Acidity in wine	NaOH 0,5M
pH & Total Acidity in brine	NaOH 0,5M
pH & Total Acidity in tomato sauce (canned food)	NaOH 0,1M

Model	pH/Total Acidity in wine	pH/Total Acidity in milk	pH/Total Acidity in tomato products	pH/Total Acidity in brine
Measuring range	0 - 37,50 g/l tartaric acid; 0 - 24,50 g/l sulphuric acid	>0,9 ºD; >0,2 ºSH, >0,009 g lactic acid/100 ml sample	0,06 - 6,4% citric acid	0,04 - 4,5% lactic acid
Display	128×64 pt, backlit liquid crystal display			
Keypad	7 membrane keys, splash-proof, PET			
Dosing volume	Sample amount			
Burette resolution	40000 steps			
pH - range	0 - 14			
Measurement units	g/l tartaric acid, g/l H_2SO_4	°SH, °D, g lactic acid/100 ml sample	% citric acid	% lactic acid
Ambient temperature	+15...+40 °C			
Connections	BNC (electrode), RCA for magnetic stirrer, RJ11 telephone connector for computer/printer, Mini-DIN for mouse		BNC (electrode), RCA for magnetic stirrer, RJ11 telephone connector for computer/printer	BNC (electrode), RCA for magnetic stirrer, RJ11 telephone connector for computer/printer, Mini-DIN for mouse
W×D×H (mm)	130×160×300			
Weight (kg)	4			

Description	Pk	Cat. No.
Titrator TitraLab® pH/TA, for the determination of pH and acid content of tartaric acid and sulphuric acid in wine	1	**709-0118**
Titrator TitraLab® pH/TA, for the determination of the pH and acid content of dairy products (milk)	1	**709-0119**
Titrator TitraLab® pH/TA, for the determination of the pH/acid content of citric acid in tomato sauce and tomato products (canned food)	1	**709-0121**
Titrator TitraLab® pH/TA, for the determination of the pH and acid content of lactic acid in brine	1	**709-0123**

Description	Pk	Cat. No.
Accessories		
Sodium hydroxide, 0,1 mol/l 0,1 N aqueous solution, AVS TITRINORM volumetric solution	1 l	**31770.294**
Sodium hydroxide, 0,5 mol/l 0,5 N aqueous solution Reag. Ph. Eur. AVS TITRINORM® volumetric solution	1 l	**31951.290**
Replacement syringe, PP, 10 ml	1	**661-0147**
Beakers, PP, 50 ml (inner Ø 30 mm)	10	**661-0148**

Titrators, TitraLab® Salt
Hach Lange

These automatic analysers are specifically designed for the determination of salt content in food and beverage applications. The TitraLab® Salt system is available in four different versions for use with various foodstuffs: dairy products, tomato sauce, brine and water.

- Integrated high resolution 40 000 step electronic burette delivers dependably accurate results
- Intuitive product interface, ready to use, pre-programmed methods and preset display provide ease of use
- With integrated peristaltic pump for automatic reagent addition: Enables automatic sample preparation prior to titration
- "All-included" application pack including electrode and accessories (excluding reagents)
- RS232C interface enables communication with a computer or printer

Ordering information: Supplied with silver electrode with cable and tube guide, 10 ml syringe with plunger, titration stand holder including magnetic stirrer, 10 titration cells (50 ml, Ø 30 mm) and power supply. Chemicals need to be ordered separately.

Application	Titrant reagent	Auxiliary reagent
Salt in solid and liquid dairy products	$AgNO_3$ 0,1 M	HNO_3 1 M
Salt in tomato sauce	$AgNO_3$ 0,1 M	HNO_3 1 M
Salt in brine	$AgNO_3$ 0,5 M	HNO_3 1 M
Salt in water	$AgNO_3$ 0,01 M	HNO_3 1 M

Model	Salt in dairy products	Salt in tomato sauce	Salt in brine	Salt in water
Measuring range	0,25 - 5,6% NaCl, 0,20 - 3,5% Cl^-	0,25 - 5,6% NaCl	2,5 - 50% NaCl	10 - 350 mg/l (ppm) Cl^-
Display	128×64 pt, backlit liquid crystal display			
Keypad	7 membrane keys, splash-proof, PET			
Dosing volume	Sample amount			
Burette resolution	40000 steps			
Measurement units	% NaCl, % Cl^-	% NaCl		mg/l NaCl, mg/l Cl^-
Ambient temperature	+15...+40 °C			
Connections	BNC (electrode), RCA for magnetic stirrer, RJ11 telephone connector for computer/printer		BNC (electrode), RCA for magnetic stirrer, RJ11 telephone connector for computer/printer, Mini-DIN for mouse	
W×D×H (mm)	130×160×300			
Weight (kg)	4			

Description	Pk	Cat. No.
Titrator TitraLab® Salt, for the determination of salt in solid and liquid dairy products	1	**709-0120**
Titrator TitraLab® Salt, for the determination of salt in tomato sauce and tomato products	1	**709-0122**
Titrator TitraLab® Salt, for the determination of salt in brine	1	**709-0124**
Titrator TitraLab® Salt, for the determination of salt in water	1	**709-0125**

Description	Pk	Cat. No.
Accessories		
Replacement syringe, PP, 10 ml	1	**661-0147**
Beakers, PP, 50 ml (inner Ø 30 mm)	10	**661-0148**
Spare pump cassette with neoprene tube, inner Ø 2 mm, 70 ml/min	1	**661-0149**
Nitric acid, 1 mol/l (1 N) aqueous solution, AVS TITRINORM® volumetric solution	1 l	**30065.291**
Silver nitrate 0,1 mol/l (0,1 N) aqueous solution AVS TITRINORM® volumetric solution	1 l	**30472.297**
Silver nitrate, 0,01 mol/l (0,01 N) aqueous solution, AVS TITRINORM® volumetric solution	1 l	**30476.291**

Titrator, SO_2 content of wine, TitraLab® SO_2
Hach Lange

This automatic analyser is specifically designed for potentiometric titration according to the Ripper method for the determination of the free SO_2 and total SO_2 content in wine.

- Integrated high resolution 40 000 steps electronic burette delivers dependably accurate results
- Intuitive product interface, ready to use, pre-programmed methods and preset display provide ease of use
- With integrated peristaltic pumps for automatic reagent additions that enable automatic sample preparation prior to titration and three titration programs that can be customised
- "All-included" application pack including electrode and accessories (excluding reagents)
- RS232C interface enables communication with a computer or printer

Ordering information: Supplied with double platinum electrode including cable and tubes, 10 ml syringe with plunger, titration stand holder including magnetic stirrer, 10 titration cells (50 ml, Ø 30 mm) and power supply. Chemicals need to be ordered separately.

Continued on next page

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Model	SO_2 in wine
Measuring range	0 - 640 mg/l SO_2
Display	128×64 pt, backlit liquid crystal display
Keypad	7 membrane keys, splash-proof, PET
Resolution	1 mg/l
Dosing volume	Sample amount
Burette resolution	40000 steps
Measurement units	mg/l
Ambient temperature	+15...+40 °C
Connections	BNC (electrode), RCA for magnetic stirrer, RJ11 telephone connector for computer/printer, Mini-DIN (mouse)
W×D×H (mm)	130×160×300
Weight (kg)	4

Description	Pk	Cat. No.
Titrator TitraLab® SO_2, for the determination of SO_2 content in wine	1	**709-0117**

Description	Pk	Cat. No.
Accessories		
Replacement syringe, PP, 10 ml	1	**661-0147**
Beakers, PP, 50 ml (inner Ø 30 mm)	10	**661-0148**
Double platinum electrode (Pt), 0 - 80 °C, with built-in tubes	1	**661-0153**
Potassium iodide AnalaR NORMAPUR® analytical reagent	250 g	**26846.235**
Sodium hydroxide, 4 mol/l (4 N) aqueous solution, AVS TITRINORM®, volumetric solution, low in carbonate	1 l	**191373M**
Sulphuric acid, 25% GPR RECTAPUR®	1 l	**84513.290**

IP67

Pocket salt meter, LAQUAtwin B-721

Horiba

This pocket meter performs salt measurements in liquid, solid and viscous samples by using unique flat sensor technology for micro-volume analysis. The replaceable sensor utilises a sodium ion selective electrode (ISE) that requires only a few drops (0,3 ml) to enable quick and accurate analysis. Ideal for soil and sap testing in agriculture as well as for food testing.

- Sensor enables direct measurements of solid food samples, no need for sample preparation
- Autocalibration function recognises standards and is user-selectable for either one- or two-point calibrations
- Auto range change, temperature compensation
- Auto hold, automatic power off after 30 minutes
- Usage of sampling sheets enables measurements in micro samples as small as 0,05 ml

Delivery information: Supplied with two batteries, pipette, instruction manual, quick manual, storage case, two bottles of standard solutions (0,5/5%), 14 ml each, and five pieces of sampling sheets.

Model	B-721
Salinity - range	0,1 - 10% (by weight)
Salinity - resolution	0,01% (0,00 - 0,99%) 0,1% (1,0 - 9,9%)
Salinity - accuracy	±10%
Temperature compensation	Automatic
Display	Custom (monochrome) digital LCD
Power supply	2 × CR2032 batteries
W×D×H (mm)	164×29×20
Weight (kg)	0,05 (without batteries)
Compliance	IP67

Description	Pk	Cat. No.
Pocket salt meter LAQUAtwin B-721	1	**709-0126**

Description	Pk	Cat. No.
Accessories		
Standard solution (NaCl 5,0%) Y021H, in bottle, 14 ml	6	**663-0240**
Standard solution (NaCl 0,5%) Y021L, in bottle, 14 ml	6	**663-0241**
Flat replacement sensor S021 for B-721, sodium ion selective	1	**662-1496**
Additional sampling sheets, Y046, packed in box	100	**662-1491**
Sampling sheet holder Y048, for samples that contain particulates, for use with sampling sheets B Y046	1	**662-1494**

Ion selective meters, nitrate/calcium, pocket format, LAQUAtwin

Horiba

B-751

B-743

Kit

Measurements of nitrate or calcium

These waterproof pocket meters provide direct measurements of different ions in liquid, solid, viscous or powder samples using unique flat sensor with an ion selective membrane. The user needs to drip a few drops of the sample on to the sensor in order to get quick results – there's no need to dilute or prepare the samples beforehand as these reagent-free meters have a wide measurement range. Samples can be as small as 0,3 ml. The meters are suitable for research and industrial applications in diverse fields, such as agriculture and food testing.

- Autocalibration function recognises standards and is user-selectable for either one- or two-point calibrations
- Auto range change, temperature compensation
- Auto hold, automatic power off after 30 minutes
- Easy to use, very convenient for quick on-site testing
- Use of sampling sheets enables measurements in micro samples as small as 0,05 ml

Delivery information: B-742T is supplied with two batteries, pipette, instruction manual, quick manual, storage case, two bottles of standard solutions (30 & 300 ppm), 14 ml each, and five pieces of sampling sheet B.
B-742 kit is supplied with two batteries, instruction manual, quick manual, storage case, carrying case, four pipettes, cleaning solution bottle (250 ml), three extraction bottles (100 ml), two sets of spoons for soil sampling, tweezers, sampling sheet B, and two sampling sheet sets.

B-743 is supplied with two batteries, pipette, instruction manual, quick manual, storage case, two bottles of standard solutions (150 & 2000 ppm), 14 ml each, and five pieces of sampling sheet B.

B-751 is supplied with two batteries, pipette, instruction manual, quick manual, storage case, two bottles of standard solutions (150 & 2000 ppm), 14 ml each, and five pieces of sampling sheet B.

Model	B-742 (Nitrate)	B-743 (Nitrate)	B-751 (Calcium)
ISE - range	NO_3^-: 30 - 600 ppm	NO_3^-: 62 - 6200 ppm (10^{-3} to 10^{-1} mol/l)	Ca^{2+}: 40 - 4000 ppm (10^{-3} to 10^{-1} mol/l)
ISE - resolution	0,1 ppm (0 - 1,0 ppm) 1 ppm (0 - 99 ppm) 10 ppm (100 - 990 ppm) 100 ppm (> 990 ppm)		
ISE - accuracy	±10% of reading value		±20% of reading value
ISE - calibration	1- or 2-point		
Display	Custom (monochrome) digital LCD		
Power supply	2 × CR2032 batteries		
W×D×H (mm)	164×29×20		
Weight (kg)	0,05 (without batteries)		
Compliance	IP67		

Description	Pk	Cat. No.
Pocket nitrate meter LAQUAtwin B-742T, for water analysis	1	**662-1712**
Pocket nitrate meter LAQUAtwin B-742, kit	1	**709-0131**
Pocket nitrate meter LAQUAtwin B-743	1	**709-0129**
Pocket calcium meter LAQUAtwin B-751	1	**709-0130**

Description	Pk	Cat. No.
Accessories		
Replacement nitrate ion electrode S040, for B-743	1	**662-1597**
Replacement calcium ion electrode S050, for B-751	1	**662-1499**
Standard solution, nitrate ion (150 ppm) Y045, in bottle (14 ml), for B-743	6	**662-3751**
Standard solution, nitrate ion (2000 ppm) Y043, in bottle (14 ml), for B-743	6	**662-3750**
Standard solution, calcium ion (150 ppm) Y051L, in bottle (14 ml), for B-751	6	**662-3757**
Standard solution, calcium ion (2000 ppm) Y051H, in bottle (14 ml), for B-751	6	**662-3756**
Additional sampling sheets, Y046, packed in box	100	**662-1491**
Sampling sheet holder Y048, for samples that contain particulates, for use with sampling sheets B Y046	1	**662-1494**

pH Indicator strips, special indicator for meat processing industry, MColorpHast™

The measurement of pH in meat plays a central role in the processing of meat products and the assessment of their quality. The slaughtering procedure triggers a series of biochemical processes that result in a shift of the initial value (pH 7,0) into the acidic range (pH 5,4 - 6,7). These strips were specifically designed to address the measurement of pH either in combination with pH meters or totally without the use of probes and meters.

- No "contamination" of the measurement site thanks to the covalent binding of the indicator dyes
- The test strip principle enables the measurement to be made directly in the meat (the plastic material is physiologically safe)
- No protein error

Description	pH range	pH gradation	Pk	Cat. No.
Special indicator for meat quality testing, MColorpHast™	5,2 - 7,2	0,4	100	**1.09632.0001**

Chloride analyser, Model 926

Measurements of the concentration of salt (sodium chloride) are required throughout the food industry (dairy products, frozen goods, salted meats, beverages, etc.) as well as in clinical situations. Model 926 is the ideal instrument for testing desalination systems or monitoring the quality of products that are prepared automatically. Model 926S is intended for chloride measurements in biological samples and is calibrated in mmol/l. It is of particular use in the final confirmation of cystic fibrosis by the analysis of sweat samples.

- Ergonomic design, easy to use and maintain
- Measures chloride and salt contents quickly and accurately
- The sensitivity of the coulometric technique enables it to register readings in ppm

Analytical methods and applications also exist for the pharmaceuticals industry, cement manufacturing, and photographic and veterinary products. Please contact VWR for more information.

Ordering information: Supplied complete with 3× silver anodes, 3× silver electrodes, 2×14 ml graduated beakers, stirrer, 25 g of electrode polishing compound, 100 ml of 200 mg/l chloride solution and 500 ml of buffer solution.

Model	926	926S
Concentration	10 - 999 mg/l chlorides; 2 - 165 mg/l salt	10 - 299 mmol/l chlorides
Measurement time	36 s for a 200 mg/l chloride sample	36 s for a 100 mmol/l chloride sample
Sample volume	0,5 ml	20 µl
Reproducibility	The values for five consecutive titrations of a nominal 200 mg/l solution will be within 3 mg/l of the mean value	The values for five consecutive titrations of a nominal 100 mmol/l solution will be within 3 mg/l of the mean value
Linearity	Results will be within ±3 mg/l in the range 50 to 299 mg/l	±1%
Power supply	Mains adapter input: 100 - 240 VAC, 50 - 60 Hz, 0,6 A Mains adapter output: 12 V, 1,25 A	Mains adapter input: 100 - 240 VAC, 50 - 60 Hz, 0.6 A Mains adapter output: 12 V, 1,25 A
W×D×H (mm)	200×250×315	
Weight (kg)	1,9	

Description	Pk	Cat. No.
Chloride analyser, industrial model 926, with RS232 interface	1	**661-0131**
Chloride analyser, clinical model 926S, with RS232 interface	1	**661-0130**

Description	Pk	Cat. No.
Accessories		
Standard chloride solution, 200 mg Cl/l (6×100 ml)	6	**661-0072**
Acid buffer solution, in vial	500 ml	**661-0086**
Set of 3 silver electrodes, including 1× cathode and 2× sensors	1 SET	**661-0068**
Set of 3 silver anodes	3	**661-0069**
Active salt data collection software and salt analysis package, for model 926	1	**661-0182**

Airborne microorganism samplers, MAS-100 NT®

Air sampler for use in cleanrooms, pharmaceutical companies, hospitals and the food industry. Made of anodised aluminium. The perforated sampling head may be sterilised and can be adjusted to sample horizontally.

- Airflow: 100 l/min, uses 90 mm Petri dishes
- Programmable delay before sampling starts and pre-selected volumes, individually adjustable
- According to ISO 14698 - 1/2
- Up to 100 samples can be logged with date, time, user and volume
- 300×0.6 mm sampling head (400×0.7 mm sampling head on request)
- Graphic illuminated display and menu guided navigation with up and down arrow and direct menu selection buttons
- USB connection
- Alarm logging up to 100 events
- Fully automatic calibration cycle with automatic creation of calibration certificate with digital anemometer DA-100 NT® and PC
- Includes state-of-the-art
- mass flow sensor to assure a constant air
- flow rate of 100 litres/m

Delivery information: Supplied in a case with a power supply, USB connection cable and CD Rom with PC software.

Description	Pk	Cat. No.
Air sampler MAS-100 NT® complete	1	**1.09191.0001**

Description	For	Pk	Cat. No.
Accessories			
Adapter for glass Petri dishes	MAS-100 NT®, MAS-100 NT Ex®, MAS-100 Eco®	1	**1.09082.0001**
Extra dust cover	MAS-100 NT®, MAS-100 Eco®	1	**1.09084.0001**
Additional perforated lid, aluminium, 400×0,7 mm	MAS-100 NT®, MAS-100 Eco®	1	**1.09088.0001**
Shoulder bag, blue, 3 chambers	MAS-100 NT®, MAS-100 NT Ex®, MAS-100 Eco®	1	**1.09126.0001**
Perforated lid 300 holes	MAS-100 NT®	1	**1.09195.0001**
Mains charger	MAS-100 NT®	1	**1.09200.0001**
Battery	MAS-100 NT®	1	**1.09208.0001**
Perforated lid for contact plates	MAS-100 NT®, MAS-100 NT Ex®, MAS-100 Eco®	1	**1.09213.0001**
Tripod quick change adapter	MAS-100 NT®, MAS-100 NT Ex®	1	**1.09223.0001**
Tube adapter	MAS-100 NT®, MAS-100 Ex®	1	**1.09224.0001**
Carry case	MAS-100 NT®, MAS-100 NT Ex®	1	**1.09225.0001**
PC interface cable	MAS-100 NT®	1	**1.09226.0001**
Standard tripod	MAS-100 NT®, MAS-100 NT Ex®, MAS-100 Eco®	1	**1.09326.0001**

Airborne microorganism samplers, MAS-100 NT Ex®

The MAS-100 NT Ex® combines all the advantages of the MAS-100 NT® but, in addition, has been tested to pr EN 50021:1996 for use in areas where there are explosive atmospheres. Supplied with test certificate.

- Explosion-proof
- Airflow: 100 l/min
- Uses 90 mm Petri dishes
- Programmable delay before sampling starts
- Pre-selected volumes, individually adjustable
- According to ISO 14698 - 1/2
- Includes state-of-the-art
- mass flow sensor to assure a constant air
- flow rate of 100 litres/m

Description	Pk	Cat. No.
Air sampler, MAS-100 NT Ex®	1	**1.09194.0001**

Description	For	Pk	Cat. No.
Accessories			
Adapter for glass Petri dishes	MAS-100 NT®, MAS-100 NT Ex®, MAS-100 Eco®	1	**1.09082.0001**
Replacement dust cover	MAS-100 NT Ex®	1	**1.09123.0001**
Perforated lid for contact plates	MAS-100 NT®, MAS-100 NT Ex®, MAS-100 Eco®	1	**1.09213.0001**
Tripod quick change adapter	MAS-100 NT®, MAS-100 NT Ex®	1	**1.09223.0001**

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Description	For	Pk	Cat. No.
Accessories			
Tube adapter	MAS-100 NT®, MAS-100 Ex®	1	**1.09224.0001**
Carry case	MAS-100 NT®, MAS-100 NT Ex®	1	**1.09225.0001**
Standard tripod	MAS-100 NT®, MAS-100 NT Ex®, MAS-100 Eco®	1	**1.09326.0001**

Digital anemometer, DA-100 NT®

For calibration of the MAS-100 NT® air samplers, except MAS-100 CG Ex®. For precise measurement of:

- Air volume (l/min)
- Air velocity (m/sec)
- Air temperature (°C)

Description	Pk	Cat. No.
Digital anemometer DA-100 NT®	1	**1.09192.0001**

Airborne microorganism samplers, MAS-100 Eco®

The MAS-100 Eco® combines many of the advantages of the MAS-100 NT® series. Ideal for air sampling in food and beverage industries.

- Airflow: 100 l/min, uses 90 mm Petri dishes
- Programmable delay before sampling starts and pre-selected volumes, individually adjustable
- According to ISO 14698 - 1/2
- Small and handy, fits perfectly into a HACCP concept
- Six pre-selected volumes
- Operation time: 3 hours
- The display is alphanumeric LCD, 16 digits with real time and date

Delivery information: MAS-100 Eco® is supplied in a small grey carry case.

Description	Pk	Cat. No.
Air sampler MAS-100 Eco®	1	**1.09227.0001**

Description	For	Pk	Cat. No.
Accessories			
Adapter for glass Petri dishes	MAS-100 NT®, MAS-100 NT Ex®, MAS-100 Eco®	1	**1.09082.0001**
Extra dust cover	MAS-100 NT®, MAS-100 Eco®	1	**1.09084.0001**
Additional perforated lid, aluminium, 400×0,7 mm	MAS-100 NT®, MAS-100 Eco®	1	**1.09088.0001**
Adapter for standard tripod	MAS-100 Eco®	1	**1.09127.0001**
Perforated lid for contact plates	MAS-100 NT®, MAS-100 NT Ex®, MAS-100 Eco®	1	**1.09213.0001**
Standard tripod	MAS-100 NT®, MAS-100 NT Ex®, MAS-100 Eco®	1	**1.09326.0001**

Airborne microorganism samplers, MAS-100 CG Ex®

According to ISO 14698-1, besides normal air, compressed gases must also be tested routinely for microbial contamination. The different types of gases used in the pharma or food industry are recognised by the instrument and compensated automatically for their individual physical characteristics. The sampling on standard Petri dishes is performed under pressure. Airflow 100 l/min. Standard 90 mm Petri dishes can be used. Individually adjustable volumes from 1-2000 l.

- Programmable delay before sampling starts and pre-selected volumes, individually adjustable
- According to ISO 14698 - 1/2
- Each sampling head is tested by an accredited institute
- Pre-programmed for compressed CO_2, N_2, or air, and programmable for many more gas types
- Explosion-proof
- Connection for PC or external adapter

Description	Pk	Cat. No.
Air sampler MAS-100 CG Ex®, supplied in a trolley case	1	**1.09327.0001**

Description	For	Pk	Cat. No.
Accessories			
Extra sampling head air sampler	MAS-100 CG Ex®	1	**1.09237.0001**

Microbial air monitoring system for sterile production areas, MAS-100 Iso NT®

The MAS-100 Iso NT® is a high-performance instrument that is based on the approved and standard impaction principle. The MAS-100 Iso NT® is used to measure the microbiological contamination of the air in sterile production areas and isolators, mainly in the pharmaceutical industry. The head (using standard 90 mm Petri dishes) can be installed at the critical control points with all electronic and moving parts kept outside the critical zone. The MAS-100 Iso NT® has a unique double valve and pump system to allow sterilisation of the head and tube in line with the isolator. The sampler also has a built in mass flow sensor ensuring the most accurate sampling possible. The MAS-100 Iso NT® is built according to GAMP4 and validated according to ISO 14698.

- Integrated mass-flow sensor
- Dialogue multilingual software
- In-line sterilisation, 100 sample and alarm log
- RABS-version (without sterilisation cycle)
- IP 54 version available
- Remote start and SQS Mode (sequential sampling over a period of time)
- Improved communication features, Profibus, RS323/485 interface

Delivery information: System includes MAS-100 Iso NT® instrument with display and Tri-Clamp adapter; stainless steel sampling head; MAS-100 Iso NT® software, and mounting bracket. Installation is not included.

Model	MAS-100 Iso NT®
Airflow rate	100 l/min
Sampling head	Ø 11 cm; weight 1,3 kg
Power	24 Volt (external power supply)
W×D×H (mm)	282,5×230×160
Weight (kg)	7,5

Description	Pk	Cat. No.
MAS-100 Iso NT®	1	**710-0934**

Description	Pk	Cat. No.
Accessories		
Cover for SH sampling head in stainless steel	1	**710-1016**
Ethernet module	1	**710-1014**
Lid perforated 300×0,6 mm	1	**710-0991**
Mounting bracket, stainless steel	1	**710-1017**
Power supply 24 V/60 W	1	**710-0988**
Profi-Bus module	1	**710-1013**
Silicone gasket	1	**710-0990**
Stainless steel base for sampling head	1	**710-0987**
Tri-Clamp	1	**710-0989**

Air samplers, SAS Super Iso

Directly derived from the SAS instrument used on the "International Space Station", the SAS Super ISO 100 and SAS Super ISO 180 have been specifically designed for pharmaceutical and hospital sectors. Portable and easily positioned, they operate with long life rechargeable batteries. SAS Super ISO and SAS Super ISO 180 are differentiated by differences in constant airflow (100 l/min and 180 l/min respectively); this choice depends on the application and allows continuous or sequential sampling from a few minutes to several hours. Both models provide facilities for data management of different implemented sampling programmes. The data can be stored on the SAS instrument itself or on any remote PC.

- Design avoids turbulence in unidirectional airflow and reaspiration of tested air in accordance with ISO specifications
- Fully compliant International Standards (ISO 14698 & USP 1116 Pharmacopeia)
- Time saving and low operating cost solutions

Delivery information: Without aspirating head and battery charger.

Model	SAS Super ISO 100	SAS Super ISO 180
Airflow rate	100 l/min	180 l/min
Sampling head	Aluminium, stainless steel or plastic (certified ready to use)	
W×D×H (mm)	120×125×275	
Weight (kg)	1,8	

Description	Pk	Cat. No.
Air sampler SAS Super ISO 100 for contact plates	1	**710-0871**
Air sampler SAS Super ISO 100 for Petri dishes	1	**710-0869**
Air sampler SAS Super ISO 180 for contact plates	1	**710-0872**
Air sampler SAS Super ISO 180 for Petri dishes	1	**710-0870**

Air samplers, DUO SAS Super 360

When environmental contamination is very low and the number of samples to be performed is high, operational duration can be an important factor in the choice of SAS instrument. Two sampling heads that operate simultaneously to sample 1000 litres of air in less than 3 minutes is the solution. The simultaneous sampling on two heads also allows you to obtain statistically representative results when using the same type of media in both heads. It is also possible to use two different media for the same sampling cycle (e.g. TSA or PCA for Total Bacterial Count and SDA for yeasts and moulds). Sampling with the two heads can halve sample process time, which is a real advantage for busy users.

- Single body with two aspirating heads
- Fast and consistent results
- Fully compliant with International Standards (ISO 14698 & USP 1116 Pharmacopeia)
- Time saving and low operating cost solutions

Delivery information: Without aspirating head and battery charger.

Model	DUO SAS Super 360
Airflow rate	180 l/min
Sampling head	Aluminium, stainless steel or plastic (certified ready to use)
W×D×H (mm)	260×110×352
Weight (kg)	2,2

Description	Pk	Cat. No.
DUO SAS Super 360 for contact plates	1	**710-0867**
DUO SAS Super 360 for Petri dishes	1	**710-0866**

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Air samplers, SAS Super IAQ

SAS Super is a complete system for the microbiological sampling of air including instrumentation for applications based on active air sampling. Designed specifically for the Indoor Air Quality (IAQ) sector, this SAS Super instrument is particularly lightweight and durable to operate in any environment. Ideal for environmental hygienists and agri-food sector operators, SAS IAQ is supplied with remote control and carrying case. Derived from SAS Super ISO 100 and SAS Super ISO 180, the SAS Super IAQ provides the same efficiency as recorded by the sampling tests conducted by CAMR-UK (Centre for Applied Microbiology & Research).

- Microbiological air monitoring solution for agri-food and environmental operators
- Includes all accessories required for microbiological air sampling
- Easy to use and time saving
- Low operating cost solution

Delivery information: Supplied with aluminium aspirating head for Petri dishes (Ø 90 mm) or contact plates (Ø 55 mm), battery charger, remote control and soft carrying case.

Model	SAS Super IAQ
Airflow rate	100 l/min
Sampling head	Aluminium
W×D×H (mm)	105×110×290
Weight (kg)	1,75

Description	Pk	Cat. No.
SAS Super IAQ sampler for contact plates, 220 V/50 Hz	1	**710-0868**
SAS Super IAQ sampler for Petri dishes, 220 V/50 Hz	1	**710-0919**

Accessories for air sampler SAS Super

710-0896

710-0891

710-0892

Description	For	Pk	Cat. No.
Adapter for Petri dishes Ø 90 mm	SAS Super IAQ, SAS Super ISO 180, SAS Super ISO 100, DUO SAS Super 360	1	**710-0882**
Aluminium adapter for Petri dishes	SAS Super ISO	1	**710-0974**
Aluminium carrying case	DUO SAS Super 360	1	**710-0876**
Aluminium head and adaptor for Petri dishes Ø 90 mm	SAS Super IAQ, SAS Super ISO 100, SAS Super ISO 180, DUO SAS Super 360	1	**710-0879**
Aluminum aspirating head for contact plates Ø 55 mm	SAS Super IAQ, SAS Super ISO 180, SAS Super ISO 100, DUO SAS Super 360	1	**710-0892**
Aluminum aspirating head for Petri dishes Ø 90 mm	SAS Super IAQ, SAS Super ISO 180, SAS Super ISO 100, DUO SAS Super 360	1	**710-0886**
Aluminum carrying case	SAS Super IAQ, SAS Super ISO 180, SAS Super ISO 100	1	**710-0875**
Battery charger between 90 to 260 V with interchangeable plug	SAS Super ISO	1	**710-0973**
Battery charger with universal plug	DUO SAS Super 360	1	**710-0993**
Downloading device for 710-0970	SAS Super ISO	1	**710-0971**
Floor tripod	SAS Super IAQ, SAS Super ISO 180, SAS Super ISO 100, DUO SAS Super 360	1	**710-0889**
Infrared remote control	SAS Super ISO	1	**710-0969**
IQ manual	SAS Super ISO 180, SAS Super ISO 100	1	**710-1047**
Manual IQ-OQ-PQ	DUO SAS Super 360	1	**710-0957**
OQ manual	SAS Super ISO 180, SAS Super ISO 100	1	**710-0956**
Soft carrying case	SAS Super ISO 180, SAS Super ISO 100	1	**710-0896**
Soft carrying case	DUO SAS Super 360	1	**710-0888**
Software for downloading data	SAS Super ISO	1	**710-0970**
Stainless steel aspirating head for contact plates Ø 55 mm	SAS ISO 180, SAS ISO 100, DUO SAS Super 360, SAS Super Isolator	1	**710-0880**
Stainless steel aspirating head for Petri dishes Ø 90 mm	SAS Super ISO 180, SAS Super ISO 100, DUO SAS Super 360, SAS Super Isolator	1	**710-0878**
Stainless steel head and adapter for Petri dishes Ø 90 mm	SAS Super ISO 180, SAS Super ISO 100, DUO SAS Super 360, SAS Super Isolator	1	**710-0877**

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Description	For	Pk	Cat. No.
Stainless steel holder for table and wall	SAS Super ISO 180, SAS Super ISO 100, DUO SAS Super 360	1	**710-0963**
Sterile daily head for contact plates Ø 55 mm	SAS Super IAQ, SAS Super ISO 180, SAS Super ISO 100, DUO SAS Super 360, SAS Super Isolator	50	**710-0890**
Sterile daily head for Petri dishes Ø 90 mm	SAS Super IAQ, SAS Super ISO 180, SAS Super ISO 100, DUO SAS Super 360	50	**710-0891**

Air samplers, SAS Super Isolator

SAS Super Isolator instruments (available with airflows of 100 l/min and 180 l/min) have been created for the specific monitoring of the closed environments of isolators and RABS, ensuring their complete separation from outside influences. The SAS instrument control unit is placed outside and connected to the aspirating head using a simple electrical connection. All possible typical contamination sources of the vacuum sampling system are removed using the SAS Super Isolator. An interesting application of this air sampler is that several heads can be controlled by a single SAS control unit providing a practical and economical solution.

- Fast sampling time - 180 litres per minute flow rate, taking less than six minutes to sample 1 l of air
- Low running cost and operational flexibility - no need to purchase expensive, proprietary media strips, cassettes, or plates; standard 55 mm contact plates or 90 mm Petri dishes can be used
- Full traceability - records day, time, site, volume of air sampled, and operator's name to ensure full traceability
- Easy to use - large back lit screen with intuitive menu; active operation status confirmed by flashing red LED
- Multiple language choice - programmable language selection for English, Spanish, German, and French

Delivery information: The SAS Super Isolator is delivered without head and battery charger.

Model	SAS Super Isolator	Duo SAS 360 Isolator
Sampling head	Stainless steel	
W×D×H (mm)	105×110×290	360×160×180
Weight (kg)	1,75	2,1

Description	Pk	Cat. No.
SAS Super Isolator sampler for contact plates with airflow of 100 l/min	1	**710-0943**
SAS Super Isolator sampler for contact plates with airflow of 180 l/min	1	**710-0944**
SAS Super Isolator sampler for Petri dishes with airflow of 100 l/min	1	**710-0945**
SAS Super Isolator sampler for Petri dishes with airflow of 180 l/min	1	**710-0946**
Duo SAS 360 Isolator for contact plates	1	**710-0977**
Duo SAS 360 Isolator for 90 mm Petri dishes	1	**710-0978**

Description	For	Pk	Cat. No.
Accessories			
Aspirating chamber for 55 mm contact plates (without head)	SAS Super Isolator	1	**710-0947**
Aspirating chamber for 90 mm Petri plates (without head)	SAS Super Isolator	1	**710-0948**
Cable for SAS connecting	SAS Super Isolator	1	**710-0964**
Daily disposable drilled head for contact plates	SAS Super Isolator	1	**710-0975**
Extension cable, length 3 m	SAS Super Isolator	1	**710-0968**
In-Out MH spare battery	SAS Super Isolator	1	**710-0998**
IQ, OQ, PQ manual	SAS Super Isolator	1	**710-0954**
Stainless steel aspirating head for contact plates Ø 55 mm	SAS ISO 180, SAS ISO 100, DUO SAS Super 360, SAS Super Isolator	1	**710-0880**
Stainless steel aspirating head for Petri dishes Ø 90 mm	SAS Super ISO 180, SAS Super ISO 100, DUO SAS Super 360, SAS Super Isolator	1	**710-0878**
Stainless steel head and adapter for Petri dishes Ø 90 mm	SAS Super ISO 180, SAS Super ISO 100, DUO SAS Super 360, SAS Super Isolator	1	**710-0877**
Sterile daily head for contact plates Ø 55 mm	SAS Super IAQ, SAS Super ISO 180, SAS Super ISO 100, DUO SAS Super 360, SAS Super Isolator	50	**710-0890**
Telecon infrared remote control	SAS Super Isolator	1	**710-0962**

Air sampler for compressed gases, SAS PINOCCHIO SUPER II

SAS PINOCCHIO SUPER II is a microbial impaction sampler to test the microbiological quality of compressed air and gases used in cleanrooms. A compressed air source is connected to the SAS PINOCCHIO SUPER II system and the flow meter regulated to achieve the required flow rate, e.g.: 100 litres of air / minute. The sampling period is timed to obtain the required total sample volume, e.g. 1000 litres.

- Fully transportable
- For 55 mm contact plates (RODAC) or standard 90 mm Petri dishes
- Calibrated according to International Standard and IQ, OQ and PQ documentation available

Delivery information: Self-contained unit consisting of connections, airflow meter, pressure gauge, tap, funnel head complete with plate housing.

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Model	PINOCCHIO SUPER II
Airflow rate	100 l/min
Material	Stainless steel
Max. temperature	40° C
W×D×H (mm)	400×200×245
Weight (kg)	2

Description	Pk	Cat. No.
PINOCCHIO SUPER II for Petri plates compressed gas and air microbial sampling	1	**710-0950**
PINOCCHIO SUPER II for contact plates compressed gas and air microbial sampler	1	**710-0949**
PINOCCHIO SUPER II for Petri plates compressed gas and air microbial sampling with calibration certificate	1	**710-0955**
PINOCCHIO SUPER II for contact plates compressed gas and air microbial sampler with calibration certificate	1	**710-0951**

Description	Pk	Cat. No.
Accessories		
IQ, OQ, PQ manual for SAS PINOCCHIO SUPER II	1	**710-0976**
Validated SAS PINOCCHIO SUPER flow meter	1	**710-0965**

Ready to use media plates (90 mm), irradiated

Available as 90 mm plates acc. to standards. TLHTh (Tween, lecithin, histidine, thiosulphate) are used as disinfectant neutralisers. Bags are available double or triple wrapped. One pack per bag displays the irradiation indicator.

- Available with certificate of irradiation/dosimetry
- VHP resistance studies available for all triple wrapped plates
- Storage at room temperature (2 to 8 °C for TSA Penase)

Packaging: The plates are packed 5 each in a plastic shrink-wrap bag. Each bag contains 2 packs (10 plates). The box supplied contains 2 bags with a total of 20 or 6×20 plates.

Description	Standard	Filling	Pk	Cat. No.
Letheen modified agar double wrapped	FDA	22 ml	20	**112750ZI**
PCA double wrapped	EPA, ISO 4833	22 ml	20	**110774ZI**
R2A double wrapped	EPA	22 ml	20	**110802ZI**
R2A triple wrapped	EPA	22 ml	20	**130802ZI**
Rose Bengal chloramphenicol penase double wrapped	-	20 ml	20	**110070PY**
Sabouraud-4% chloramphenicol agar double wrapped	-	22 ml	20	**110884CY**
Sabouraud 4% dextrose agar (SDA) with disinfectant neutraliser triple wrapped	-	22 ml	20	**110884TI**
Sabouraud 4% dextrose agar double wrapped	EP, USP	22 ml	20	**110884ZI**
Sabouraud 4% dextrose agar triple wrapped	EP, USP	22 ml	20	**130884ZI**
TSA double wrapped	EP, USP, ISO	22 ml	20	**111114ZI**
TSA penase double wrapped	-	22 ml	20	**111114PY**
TSA penase with neutralisers TLHTh double wrapped	-	22 ml	20	**111114RY**
TSA penase with neutralisers TLHTh triple wrapped	-	22 ml	20	**131114RY**
TSA TLHTh double wrapped	Harm Ph	22 ml	20	**111114TI**
TSA TLHTh triple wrapped	Harm Ph	22 ml	20	**131114TI**
TSA triple wrapped	EP, USP, ISO	22 ml	20	**131114ZI**

Contact plates for surface and air control, irradiated

Contact plates are ideal for monitoring the microbiological contamination of surface and air (using an air sampler) inside cleanrooms, isolators, RABS (Restricted Access Barrier), food industries and hospitals. The triple wrapping ensures that the package itself does not contaminate the environment as the first wrapper is removed just before entering the clean area. The packaging of plates containing PCA is not irradiated.

- The plates are packed with a special triple wrapped packaging with irradiation indicator
- Possibility of using the PET transparent reusable container to transport the plates to the laboratory after the sampling
- Special packaging for good protection of the product during transport and storage
- Available with TLHTh (Tween, lecithin, histidine, thiosulphate) disinfectant neutralisers
- Available with certificate of irradiation/dosimetry
- VHP resistance studies available for all triple wrapped plates

Packaging: The box supplied contains 8×10 triple wrapped packs with a total of 80 plates. 8 PET transparent reusable containers are included.

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Description	Standard	Filling	Pk	Cat. No.
PCA contact TLHTh triple wrapped	-	13 ml	80	**140774TI**
PCA contact triple wrapped	EPA, ISO 4833	13 ml	80	**140774ZI**
Rose bengal chloramphenicol agar contact triple wrapped	-	13 ml	80	**140070ZI**
Sabouraud 4% dextrose agar contact TLHTh triple wrapped	Ph. Eur., USP, JP	13 ml	80	**140884TI**
Sabouraud 4% dextrose agar contact triple wrapped	Ph. Eur., USP, JP	13 ml	80	**140884ZI**
Sabouraud chloramphenicol contact triple wrapped	-	12 ml	80	**140884CY**
VRBG agar contact triple wrapped	Ph. Eur., USP, JP	13 ml	80	**151203ZA**

Contact plates, blister packed, irradiated

Available in two pack sizes - triple wrapped (24 plate pack) and double wrapped (30 plate pack). Plates are packed in a pack with 6 blisters. Each blister contains 1 plate so every time you open a compartment you use only 1 plate. Available with TLHTh disinfectant neutraliser (Tween, lecithin, histidine, thiosulphate).

- Double or triple wrap prevents contamination during transport and storage
- Available with certificate of irradiation/dosimetry
- VHP resistance studies available for all triple wrapped plates
- Storage at room temperature (2 to 8 °C for TSA Penase)

Packaging: 30 or 4×30 plate packs comprise of 5 blister packs with an additional cellophane bag. 24 plate packs comprise of 4 blister packs with two additional cellophane bags. The irradiation indicator is featured on each blister.

Description	Standard	Filling	Pk	Cat. No.
Baird Parker agar blister double wrapped	-	12 ml	30	**250063UA**
Cetrimide agar blister double wrapped	-	12 ml	30	**250793ZI**
MacConkey agar blister double wrapped	-	12 ml	30	**250641ZA**
Malt extract agar blister double wrapped	-	12 ml	30	**250544ZI**
Mannitol salt agar blister double wrapped	-	12 ml	30	**250560ZA**
PCA blister triple wrapped	EPA, ISO 4833	12 ml	24	**270774ZI**
PCA contact blister double wrapped	EPA, ISO 4833	13 ml	30	**250774ZI**
PCA TLHTh blister double wrapped	-	12 ml	30	**250774TI**
PCA TLHTh blister triple wrapped	-	12 ml	24	**270774TI**
Rose Bengal chloramphenicol agar contact blister double wrapped	-	13 ml	30	**250070ZI**
Sabouraud 4% dextrose agar contact blister double wrapped	EP, USP	13 ml	30	**250884ZI**
Sabouraud 4% dextrose agar contact blister TLHTh double wrapped	-	13 ml	30	**250884TI**
Sabouraud 4% dextrose agar contact blister TLHTh triple wrapped	-	13 ml	24	**270884TI**
Sabouraud 4% dextrose agar contact blister triple wrapped	EP, USP	13 ml	24	**270884ZI**
Sabouraud glucose 4% chloramphenicol agar blister double wrapped	-	12 ml	30	**250884CY**
TSA contact blister double wrapped	EP, USP, ISO	13 ml	30	**251114ZI**
TSA contact blister penase double wrapped	-	13 ml	30	**251114PY**
TSA contact blister penase TLHTh double wrapped	-	13 ml	30	**251114RY**
TSA contact blister penase TLHTh triple wrapped	-	13 ml	24	**271114RY**
TSA contact blister TLHTh double wrapped	-	13 ml	30	**251114TI**
TSA contact blister TLHTh triple wrapped	-	13 ml	24	**271114TI**
TSA contact blister triple wrapped	EP, USP, ISO	13 ml	24	**271114ZI**
TSA with cycloheximide blister double wrapped	-	12 ml	30	**251114AF**
TSA with neutralisers TLHTh blister double wrapped	-	12 ml	30	**251114SI**
VRB agar blister double wrapped	-	12 ml	30	**251183ZA**
VRBG agar contact blister double wrapped	ISO 5552	13 ml	30	**251203ZA**

Contact plates

The range is manufactured from high quality raw materials. All the culture media are manufactured using selected dehydrated bases, and comply with the requirements of ISO 11133 (food microbiology). Manufactured under GMP, the media is produced using the latest technology and is subject to strict quality controls carried out by qualified microbiologists.

- Packed under cleanroom conditions to avoid contamination
- Storage at 2 to 8 °C
- Manufactured under GMP with formulations that follow specifications of the various Pharmacopoeias and ISO regulations

Description	Filling	Pk	Cat. No.
Contact plates total count	16,5 ml	40	**AX061101**
Contact plates yeast and moulds	16,5 ml	40	**AX061102**

Plates for isolators and cleanrooms, Envirocheck® Settle

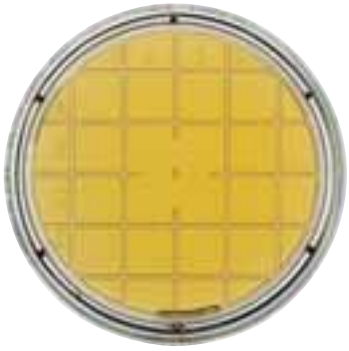
There is increasing need for effective air monitoring in all areas where airborne microorganisms may contaminate or affect industrial products and processes. Air monitoring is therefore highly important in all industries which have cleanroom areas with filtered air. The Envirocheck® Settle plates (90 mm diameter plates) can easily be used for active air sampling in combination with the different MAS-100® microbial air monitoring systems. In addition, the plates can also be used for passive air sampling. To fulfil the requirements for protected areas the Envirocheck® Settle plates are triple wrapped and gamma-irradiated. The 90 mm Settle plates are filled with 25 ml of media to avoid desiccation, for example, after active air sampling of 1000 litres and long incubation of up to 7 days. The inner bag is impermeable to H_2O_2 and includes a pouch containing a drying agent to minimise the formation of condensation. All plates are stored at room temperature (15 °C to 25 °C), hence refrigeration is not required. Storage at site of application is possible.

- Gamma irradiated, triple wrapped, H_2O_2-impermeable inner bag
- Fill volume of 25 ml enable long incubation times
- Four neutralisers to inactivate any residual disinfectants
- A pouch containing a drying agent minimises the formation of condensation
- Product name, expiry date, lot number and serial production number are imprinted on each Envirocheck® Settle plate for safe and easy product identification and shelf life monitoring

Packaging: Triple wrapped, 2 sets of 10 plates each.

Description	Pk	Cat. No.
Sabouraud 4% dextrose agar with neutralisers (0.07% lecithin, 0.5% polysorbate 80, 0.05% histidine, 0.05% thiosulphate)	20	**1.18411.0020**
Tryptic soy agar with neutralisers (0.07% lecithin, 0.5% polysorbate 80, 0.05% histidine, 0.05% thiosulphate)	20	**1.18410.0020**

Contact plates for isolators and cleanrooms, Envirocheck® Contact



As a simple and efficient way to detect microbiological contamination, Envirocheck® Contact plates are used to screen for bacteria, yeasts and moulds related to contamination in the production process. The contact plates serve to examine surfaces in isolators and/or cleanrooms. In order to fulfil the requirements for protected areas, all Envirocheck® Contact plates for isolators and cleanrooms are triple wrapped and gamma irradiated. The inner bag is impermeable to H_2O_2 and includes a pouch containing a drying agent to minimise the formation of condensation. To inactivate any residual disinfectants on the surface to be tested, the Envirocheck® Contact plates for isolators and cleanrooms additionally contain 4 neutralising agents. All plates are stored at room temperature (15 to 25 °C), hence refrigeration is not required. Storage at site of application is possible.

- Gamma irradiated, triple wrapped, H_2O_2-impermeable inner bag
- Four neutralisers to inactivate any residual disinfectants
- A pouch containing a drying agent to minimise the formation of condensation
- Long shelf life - up to 9 months and long incubation time possible
- Product name, expiry date, lot number and serial production number are imprinted on each plate for safe and easy product identification and shelf life monitoring

Packaging: Triple wrapped, 2 sets of 10 plates each.

Description	Pk	Cat. No.
Sabouraud 4% dextrose agar with neutralisers (0.07% lecithin, 0.5% polysorbate 80, 0.05% histidine, 0.05% thiosulphate)	20	**1.18409.0020**
Tryptic soy agar with neutralisers (0.07% lecithin, 0.5% polysorbate 80, 0.05% histidine, 0.05% thiosulphate)	20	**1.18408.0020**

Contact plates for the food and beverage industry, Envirocheck® Contact

As a simple and efficient way to detect microbiological contaminations, Envirocheck® Contact plates (55 mm diameter) are used to screen for bacteria, yeasts and moulds related to a contamination in the production process. The contact plates serve to examine surfaces e.g. floors, walls, textiles and working garments. Envirocheck® Contact plates for hygiene monitoring of surfaces are single bagged. All plates are stored at room temperature (15 to 25 °C), hence refrigeration is not required. Storage at site of application is possible.

- A pouch containing a drying agent to minimise the formation of condensation
- Long shelf life up to 9 months and storage at room temperature
- Product name, expiry date, lot number and serial production number are imprinted on each plate for safe and easy product identification and shelf life monitoring

Packaging: Single bagged, 2 sets of 10 plates each.

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Description	Pk	Cat. No.
Plate count agar	20	**1.18412.0020**
Sabouraud 4% dextrose agar with chloramphenicol	20	**1.18414.0020**
VRBD agar	20	**1.18417.0020**

Contact plate applicator, Contact Weight

Used in combination with contact plates, the weight enables the standardisation of microbiological surface control between operators. It applies the same constant pressure for a preset time on the contact plate. This ensures results are directly comparable. The Rodac-Weight meets the ISO 18593 Standard and has a sterilisable stainless steel base and pull out digital timer.

- Dry heat or steam sterilisable stainless steel base with pull-out digital timer
- Used with different types of contact plates
- According to ISO 18593
- Weighs only 500 g

Description	Pk	Cat. No.
Contact plate applicator, Contact Weight	1	**710-0961**

Hygiene monitoring system, HY-LiTE® 2

Rapid quantitative hygiene monitoring in liquids and on surfaces with ATP-bioluminescence HY-LiTE® 2, contained in a convenient lightweight shoulder bag with data logging and TREND2 software for advanced data management. The HY-LiTE® TREND2 software can be used to compile HACCP plans and individual limits. Graphs showing results make them easy to evaluate and interpret. HY-LiTE® is already used in a wide variety of production and processing fields, like the food industry, packing industry, services (cleaning of buildings), community catering and large scale kitchens, drinks manufacturers, state owned institutions or the pharmaceutical industry.

- Simple to use and easily portable, can be used anywhere by anyone
- Produces results within one minute: Can be used by production workers immediately after cleaning, allowing any corrective action to be taken before production begins
- Luminometer holds data from 2000 tests enabling trends to be identified as well as seeing the 'before and after' effect of cleaning procedures
- Built-in printing, in-depth results on the spot and away from laboratory conditions
- Wide operating temperature range (5 to 35 °C), can be used anywhere from cold stores to hot food processing areas

Delivery information: Luminometer supplied with printer, mains power supply and adapters for international use, printer paper roll, four alkaline batteries, TREND2 Windows software for PCs, PC connector cable.

Description	Pk	Cat. No.
HY-LiTE® 2 system complete with software (CD) in several languages in a bag	1	**1.30100.0301**

Description	Pk	Cat. No.
Accessories		
HY-LiTE®, ATP 1 ng/ml standard	1	**1.30195.0005**
HY-LiTE® plus ATP test	20 Tests	**1.30895.0021**
HY-LiTE® free ATP pens	50	**1.30194.0021**
HY-LiTE® hygiene swab	50	**1.30103.0001**
HY-LiTE® rinse solution	50	**1.30104.0001**
HY-LiTE® refill pack for testing surfaces with swabs	100 Tests	**1.30101.0021**
HY-LiTE® sampling pen, for testing liquids	50 Tests	**1.30102.0021**
HY-LiTE® 2 replacement paper rolls	5	**1.30110.0205**

System for testing jet fuel, HY-LiTE® Jet A1 Fuel Test

For aviation fuel used in civilian air transport. Aviation fuel contains small quantities of water, so it is vulnerable to microbiological attack. Microbiological contamination in fuel can lead to operational problems, e.g. clogged filters or corroded tanks. This test is an alternative for anyone who monitors or deals with aviation fuel. Previously, test results were only available after three days. With the HY-LiTE® test, results are returned in just 10 minutes. This test is recommended in the IATA (International Air Transport Association) Directive.

- A simple, on-site test, documentation in the device
- Same method for samples with or without water
- Shows biological activity directly in the sample, regardless of bacteria or other bio films
- Quantitative results and simple interpretation
- Flexible test volume (1 l is recommended)

Delivery information: Kit includes 20 pens, 20 long and 20 short pipettes.

Description	Pk	Cat. No.
HY-LiTE® Jet A1 fuel test kit	20 Tests	**1.30196.0021**
HY-LiTE® 2 system complete with software (CD) in several languages in a bag	1	**1.30100.0301**

Colour hygiene test, HY-RiSE®

The HY-RiSE® kit contains a colour hygiene test strip for manual assessment of the general cleanliness of surfaces, especially in the food and beverage industry. Detects food residues and microorganisms, so-called invisible dirt, which can be hazardous to health. The principle for testing is based on detection of NAD/NADH.

- Much more sensitive than simple visual inspection
- Easy to perform and read
- Clear result within 5 minutes
- No instrument required, all you need in a pocket format

Description	Pk	Cat. No.
HY-RiSE® (50 tests)	50	**1.31200.0001**

VWR PROLABO CHEMICALS

STERILE

Dip slides, push cap

Dip slides for microbiological monitoring of surfaces and in liquids. Each slide has media on 2 sides: Choice of the same medium or two different media on the two sides of the slides; this allows sampling of two surfaces with every single slide. Testing with dip slides is a safe, reliable, economical and fast indicator of the presence of microorganisms. The dip slides with a push cap have a larger contact area.

- Supplied sterile
- Sampling takes only a few seconds
- The results are easily read after just 24 - 48 hours

Type	Push cap
Contact area (cm^2)	10
Dimensions	30 mm tube, 110 mm high
Tray W×L (mm)	50×22
Paddle size (mm)	80×28

Description	Pk	Cat. No.
Baird Parker, on both sides	10	**535302D**
Baird Parker, on both sides	100	**535303D**
Baird Parker and Total count agar	10	**535304D**
Baird Parker and Total count agar	100	**535305D**
Baird Parker and VRBG	10	**535308D**
Malt extract agar, on both sides	10	**535328D**
Malt extract agar, on both sides	100	**535329D**
Nutrient agar and Pseudomonas agar	10	**535182R**
Nutrient agar and Pseudomonas agar	100	**535184T**

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Description	Pk	Cat. No.
Nutrient agar with TTC, on both sides	10	535092Q
Nutrient agar with TTC, on both sides	100	535094S
Nutrient agar with TTC and malt extract agar	10	535102B
Nutrient agar with TTC and malt extract agar	100	535104D
Nutrient agar with TTC and neutralisers	10	535309D
Nutrient agar with TTC and neutralisers	100	535310D
Nutrient agar with TTC and rose bengal agar	10	535112D
Nutrient agar with TTC and rose bengal agar	100	535114F
PCA on both sides	100	535124H
Plate count agar and MacConkey agar	10	535142J
Plate count agar and MacConkey agar	100	535144L
Plate count agar and OGYE agar with neutralisers	10	535132H
Plate count agar and OGYE agar with neutralisers	100	535134J
Plate count agar and VRBGA	10	535162N
Plate count agar and VRBGA	100	535164P
Plate count agar and VRBGA with neutralisers	10	535172P
Plate count agar and VRBG with neutralisers	100	535174R
Plate count agar MacConkey agar with neutralisers	10	535152L
Plate count agar MacConkey agar with neutralisers	100	535154N
Plate count agar with neutralisers, on both sides	10	535324D
Plate count agar with neutralisers, on both sides	100	535325D
Plate count agar with TTC, on both sides	10	535311D
Plate count agar with TTC, on both sides	100	535312D
Plate count agar with TTC and MacConkey agar 3	100	535319D
Plate count agar with TTC and MacConkey agar 3	10	535318D
Plate count agar with TTC and MacConkey agar 3 with neutralisers	10	535316D
Plate count agar with TTC and MacConkey agar 3 with neutralisers	100	535317D
Plate count agar with TTC and neutralisers, on both sides	10	535313D
Plate count agar with TTC and neutralisers, on both sides	100	535314D
Pseudomonas CFC and MacConkey 3 agar	10	535322D
Pseudomonas CFC and MacConkey 3 agar	100	535323D
Rose bengal agar	10	535202E
Rose bengal agar	100	535204G
TSA with malt extract agar, on both sides	10	535320D
TSA with neutralisers, on both sides	10	535326D
TSA with neutralisers, on both sides	100	535327D
TSA with plate count agar	10	535122F
TSA with TTC and malt extract agar	100	535321D

Mini incubator, CULTURA®

Small, compact incubator for horizontal or vertical incubation of dip slides (18) or plates (12).

- Temperature 25 to 45 °C (±1 °C)
- Safe and maintenance-free
- Easy to clean

Weight: 1,1 kg

Safe handling (VDE/TŰV); CE and GS certified according to international standards

Delivery information: Each incubator supplied with 1 multi rack and 1 thermometer.

Description	W×D×H ext. (mm)	W×D×H int. (mm)	Pk	Cat. No.
CULTURA® mini incubator for microbiology (220 V)	310×168×155	220×150×120	1	1.13311.0001

Description	Pk	Cat. No.
Accessories		
Multi rack	1	1.13312.0001

Dip slides for surfaces and in liquids, Envirocheck®

Envirocheck® Contact slides are widely used to check critical control points (CCP's) within the HACCP (Hazardous Analysis Critical Control Point) for the microbiological hygiene control of surfaces in production lines and equipment. Additionally these slides can be used to check the microbiological hygiene status of liquids. The use of a variety of media on the contact slides allows the detection of organisms from liquids as well as from surfaces. These slides provide semi-quantitative results for 5 different parameters. The easy incubation in the Cultura® mini incubator also reduces the necessary workspace thereby freeing up the working environment. Each contact slide is packed in a PC tube, which protects the agar media against contamination before and after sampling.

- Flexible contact slide allows sampling even in difficult to reach areas
- Easy to use
- Protected against contamination
- Storage at <15 °C (ideally at 12 - 15 °C)
- The expiry date is written on each box

Packaging: 10 slides/box

Description	Pk	Cat. No.
Contact C for the detection of total coliforms / E.coli, side A: Plate count agar; side B: Chromocult® Coliform agar	10	**1.02136.0001**
Contact DC for disinfectant control, side A: Tryptic soy agar; side B: Tryptic soy agar with neutralisers	10	**1.02147.0001**
Contact E for the detection of Enterobacteriaceae, side A: Plate count agar; side B: VRBD agar	10	**1.02137.0001**
Contact TVC for total colony counts, side A: Nutrient agar with TTC; side B: Nutrient agar	10	**1.02149.0001**
Contact YM(R) for the detection of yeasts and moulds, side A: Tryptic soy agar with TTC; side B: Rose bengal chloramphenicol agar (R)	10	**1.02139.0001**

Dip culture media for bacteriological urine analysis, Cult-Dip® plus

Cult-Dip® plus is a bacteriological culture test for detecting and enumerating *E. coli* in urine samples. Fluorescent detection using a UV lamp enables *E. coli* infections to be clearly identified.

- Allows multiple isolates of *E. coli* to be identified
- Simple handling
- Quick and clear analysis

Description	Pk	Cat. No.
Cult-Dip® plus (Brolacin/MacConkey-Agar)	10	**1.00777.0001**

ALL YOU NEED FOR CHEMICAL ANALYSIS

A great companion for chemists in any industry

- Sampling and sample preparation
- Spectroscopy, chromatography and physical measurement
- Waste and hazard management

Request your copy from your local VWR sales office or vwr.com

Dehydrated culture media

Dehydrated media are used for a wide variety of applications. To minimise the risks associated with powdered culture media, the majority of Merck's dehydrated culture media is produced in granular form. Merck uses ingredients of non animal origin to minimise the potential risk of transmissible spongiform encephalitis (TSE). When there is no alternative, only ingredients which are recommended by EDQM, and belonging to TSE category B or C are used. This ensures that the product is of the highest quality and in compliance with the standards for food control, microbiological testing on finished products and starting materials, and quality control in the pharmaceuticals and cosmetics industries. Custom-made media can be prepared to meet individual customer specifications. The formulation is kept confidential via a Non Disclosure Agreement. Please enquire for further details.

Advantages of granulated Merck media:

- Substantially less dust is generated during handling, reducing the risks of sensitisation and the intake of toxic substances
- Simple to use as the granules have good wetting properties, which speeds up the suspension and dissolution process and avoids the formation of hard to dissolve clumps
- Homogeneous distribution of ingredients in the pack is guaranteed even after prolonged storage, so there are no adverse segregation effects
- Economical, because there is no need to purchase and handle additional expensive supplements, whenever possible the base medium contains the selective components
- Safe, because the animal derived media are produced from BSE low risk (Cat III and IV) ingredients

The compositions comply with standards such as ISO, AFNOR, APHA, AOAC, FDA-BAM, USDA-FSIS, EP and USP.

Description	Standard	Pk	Cat. No.
A-1 medium for microbiology	-	500 g	**1.00415.0500**
Alkaline peptone water	ISO	500 g	**1.01800.0500**
Anaerobic agar acc. to Brewer	-	500 g	**1.05452.0500**
Antibiotic agar No. 1	EP, USP, AOAC	500 g	**1.05272.0500**
Antibiotic agar No. 11	-	500 g	**1.05269.0500**
Antibiotic agar No. 5	-	500 g	**1.05271.0500**
APT agar	APHA	500 g	**1.10453.0500**
Azide dextrose broth	-	500 g	**1.01590.0500**
Baird Parker agar (base)	ISO (1977), FIL/IDF (1990), DIN Norm 10178	500 g	**1.05406.0500**
BAT agar	USP	500 g	**1.07994.0500**
Bile aesculin azide agar	DIN EN ISO 7899-2	500 g	**1.00072.0500**
Bismuth sulphite agar acc. to Wilson-Blair	AOAC, APHA, USP	500 g	**1.05418.0500**
Blood agar (base)	APHA	500 g	**1.10886.0500**
Blood agar (base) No. 2	ISO	500 g	**1.10328.0500**
Bolton selective broth (base)	-	500 g	**1.00068.0500**
BPLS agar brillant green-phenol red-lactose- sucrose-agar	-	500 g	**1.07237.0500**
BPLS agar mod. brillant green-phenol red-lactose-sucrose-agar, mod.	ISO	500 g	**1.10747.0500**
Brain heart agar	-	500 g	**1.13825.0500**
Brain heart broth	ISO, AOAC, APHA	500 g	**1.10493.0500**
BRILA broth brillant green-bile-lactose-broth	ISO, AOAC, APHA	500 g	**1.05454.0500**
Brilliant green bile broth (FIL/IDF ISO APHA DIN) (BRILA broth)	ISO, AOAC, APHA	5 kg	**1.05454.5000**
BROLACIN agar (C.L.E.D. agar) bromothymol blue-lactose-cystine-agar	-	500 g	**1.01638.0500**
Bryant Burkey broth	-	500 g	**1.01617.0500**
Buffered listeria enrichment broth acc. to FDA/BAM FDA/BAM (base)	IDF, BAM	500 g	**1.09628.0500**
Calcium caseinate agar	-	500 g	**1.05409.0500**
Campylobacter selective agar blood-free (mod. CCDA) (base)	ISO	500 g	**1.00070.0500**
Caseinpeptone-lecithin-polysorbate-broth (base)	-	500 g	**1.11723.0500**
CAYE broth	-	100 g	**1.00060.0100**
Cereus selective agar acc. to Mossel (base) MYP agar	AOAC, ISO, APHA	500 g	**1.05267.0500**
Cetrimide agar	Ph. Eur 5.6	500 g	**1.05284.0500**
CGYE (Caseinhydrolysate-glucose-yeast extract) broth	-	100 g	**1.01868.0100**
China blue-lactose agar	-	500 g	**1.02348.0500**
Columbia blood agar (base)	Ph.Eur 5.6	500 g	**1.10455.0500**
Count agar sugar-free FIL-IDF	-	500 g	**1.10878.0500**
DCA agar acc. to Weenk	-	500 g	**1.10259.0500**
Dermatophytes selective agar (DTM) acc. to Taplin	-	500 g	**1.10896.0500**
Desoxycholate lactose agar	APHA	500 g	**1.02894.0500**
DEV lactose broth	-	500 g	**1.10689.0500**
DEV lactose peptone broth (DIN)	-	500 g	**1.10690.0500**
DEV nutrient agar	DIN EN ISO 6222	500 g	**1.11471.0500**
DEV nutrient agar	DIN EN ISO 9308-1	5 kg	**1.11471.5000**
DEV tryptophan broth	DIN EN ISO 9308-1	500 g	**1.10694.0500**
Dextrose-casein-peptone agar	-	500 g	**1.10860.0500**
DHL agar acc. to Sakazaki	-	500 g	**1.11435.0500**
Dichloran glycerol agar (DG18)	-	500 g	**1.00465.0500**
Dichloran rose bengal chloramphenicol agar	APHA	500 g	**1.00466.0500**
Differential reinforced clostridial broth (DRCM)	DIN	500 g	**1.11699.0500**

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Description	Standard	Pk	Cat. No.
DNase test agar	APHA	500 g	**1.10449.0500**
EC-broth	APHA, ISO, AOAC	500 g	**1.10765.0500**
EE broth Mossel (EP)	Ph.Eur 5.6	500 g	**1.05403.0500**
EMB agar (eosin methylene blue lactose sucrose agar)	-	500 g	**1.01347.0500**
ENDO agar	APHA	500 g	**1.04044.0500**
Fluid thioglycollate medium G	-	500 g	**1.16761.0500**
Fluid thioglycollate medium G	-	5 kg	**1.16761.5000**
Fluid thioglycollate medium with resazurin	AOAC, BAM, COMPF, EP, USP	500 g	**1.08191.0500**
Fluid thioglycollate medium with resazurin	AOAC, BAM, COMPF, EP, USP	5 kg	**1.08191.5000**
Gassner agar water blue metachrome yellow lactose agar	-	500 g	**1.01282.0500**
Gassner agar water blue metachrome yellow lactose agar	-	5 kg	**1.01282.5000**
Giolitti-Cantoni broth staphylococcus enrichment broth (base)	IDF, DIN, ISO, APHA	500 g	**1.10675.0500**
GN enrichment broth acc. to Hajna	APHA	500 g	**1.10756.0500**
GSP agar Pseudomonas-Aeromonas selective agar acc. to Kielwein (base)	-	500 g	**1.10230.0500**
Hektoen enteric agar	ISO, AOAC, APHA	500 g	**1.11681.0500**
Kanamycin Aesculin azide agar	-	500 g	**1.05222.0500**
KF-streptococcus agar (base)	APHA	500 g	**1.10707.0500**
King agar B (base) (Dansk Standard)	DIN, USP, BAM	500 g	**1.10991.0500**
Kligler agar double sugar iron agar	ISO, APHA	500 g	**1.03913.0500**
Lactose broth	APHA, USP XXVI (2003), EP II	500 g	**1.07661.0500**
Lauryl sulphate broth	ISO, AOAC, APHA	500 g	**1.10266.0500**
Lauryl sulphate broth	ISO, AOAC, APHA	5 kg	**1.10266.5000**
LB-agar acc. to Miller for E. coli		500 g	**1.10283.0500**
LB-broth acc. to Miller	-	500 g	**1.10285.0500**
LB-broth acc. to Miller	-	5 kg	**1.10285.5000**
Leifson agar	-	500 g	**1.02896.0500**
Letheen agar base mod.	USP	500 g	**1.10404.0500**
Letheen broth base mod.	USP	500 g	**1.10405.0500**
Levine EMB agar	APHA	500 g	**1.01342.0500**
Listeria enrichment broth (base) acc. to FDA/IDF-FIL	IDF, BAM	500 g	**1.11951.0500**
Listeria enrichment broth acc. to FDA	APHA, BAM	500 g	**1.10549.0500**
Listeria enrichment broth acc. to FDA	APHA, BAM	5 kg	**1.10549.5000**
Listeria-Palcam agar (base) acc. to van Netten et al.	ISO, APHA	500 g	**1.11755.0500**
Listeria-palcam broth acc. to van Netten et al.	-	500 g	**1.10823.0500**
Listeria selective enrichment broth acc. to Fraser (base)	ISO 11290-1	500 g	**1.10398.0500**
Lysine iron agar	AOAC, APHA	500 g	**1.11640.0500**
M 17 - agar acc. to Terzaghi	APHA	500 g	**1.15108.0500**
M 17 - broth acc. to Terzaghi	APHA	500 g	**1.15029.0500**
MacConkey agar	Ph. Eur 5.6	500 g	**1.05465.0500**
MacConkey broth	Ph.Eur 5.6	500 g	**1.05396.0500**
Malachite green broth base	-	500 g	**1.10329.0500**
Malt extract agar	-	500 g	**1.05398.0500**
Malt extract agar	-	5 kg	**1.05398.5000**
Malt extract broth	-	500 g	**1.05397.0500**
Mannitol salt phenol red agar	USP	500 g	**1.05404.0500**
Maximum recovery diluent	-	500 g	**1.12535.0500**
M-broth	AOAC, APHA	500 g	**1.10658.0500**
Meat liver agar	-	500 g	**1.15045.0500**
m EC broth with novobiocin	-	500 g	**1.14582.0500**
Membane lauryl sulphate broth		500 g	**1.10133.0500**
Membrane filter rinse fluid	USP	500 g	**1.05286.0500**
M-endo agar LES	APHA	500 g	**1.11277.0500**
M-FC agar	AOAC	500 g	**1.11278.0500**
Mineral-Mod. Glutamate Agar (MMGA)	-	500 g	**1.09045.0500**
MRS agar (DIN) acc. to De-Man, Rogosa and Sharpe	ISO DIN, APHA	500 g	**1.10660.0500**
MRS broth (DIN) acc. to De-Man, Rogosa and Sharpe	ISO DIN, APHA	500 g	**1.10661.0500**
MR-VP broth		500 g	**1.05712.0500**
MSRV medium base modified	AOAC	500 g	**1.09878.0500**
mTSB Broth with novobiocin	-	500 g	**1.09205.0500**
Mueller-Hinton-agar	-	500 g	**1.05437.0500**
Mueller-Hinton-agar acc. to NCCLS	NCCLS	500 g	**1.05435.0500**
Mueller-Hinton-broth	-	500 g	**1.10293.0500**
NaCl-peptone broth	Ph. Eur 5.6	500 g	**1.10582.0500**
Nutrient agar	APHA	500 g	**1.05450.0500**
Nutrient broth	-	500 g	**1.05443.0500**
OF basal medium (base) acc. to Hugh and Leifson	-	500 g	**1.10282.0500**
OGYE agar (base)	APHA, ISO	500 g	**1.05978.0500**
Orange serum agar	APHA	500 g	**1.10673.0500**
Oxford Listeria selective agar (base)	IDF-FIL 143:1990	500 g	**1.07004.0500**
Peptone water (buffered)	ISO EU 6579	500 g	**1.07228.0500**
Peptone water (buffered)	ISO EU 6579	5 kg	**1.07228.5000**
Phenol red broth (Base)	ISO	500 g	**1.10987.0500**
Plate count agar (APHA)	ISO, AOAC, APHA	500 g	**1.05463.0500**
Plate count agar (APHA)	ISO, AOAC, APHA	5 kg	**1.05463.5000**
Plate count skim milk agar (FIL/IDF DIN)	DIN, IDF	500 g	**1.15338.0500**

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Description	Standard	Pk	Cat. No.
Potato dextrose agar	AOAC, USP, APHA	500 g	**1.10130.0500**
Pseudomonas agar (base)	DIN EN ISO 12780	500 g	**1.07620.0500**
Pseudomonas agar F base (USP)	USP	500 g	**1.10989.0500**
Pseudomonas agar P (Base)	-	500 g	**1.10988.0500**
R2-A agar	APHA, EP	500 g	**1.00416.0500**
Rambach® agar, for 4x1 l	FDA	4	**1.07500.0002**
Rambach® agar, for 4x250 ml	FDA	4	**1.07500.0001**
Rambach® agar, for 50 l	FDA	50 l	**1.07500.0003**
RCM broth	Ph.Eur 5.6	500 g	**1.05411.0500**
Reinforced clostridial agar (RCM)	EP	500 g	**1.05410.0500**
Rogosa agar (lactobacillus selective agar)	APHA	500 g	**1.05413.0500**
Rose bengal chloramphenicol agar (RBC)	-	500 g	**1.00467.0500**
RVS (EP)	Ph.Eur 5.6	500 g	**1.07666.0500**
Saboraud 4% dextrose agar	Ph. Eur 5.6	500 g	**1.05438.0500**
Sabouraud 2% dextrose agar	-	500 g	**1.07315.0500**
Sabouraud 2% dextrose broth	-	500 g	**1.08339.0500**
Sabouraud 4% dextrose agar	-	5 kg	**1.05438.5000**
Sabouraud 4% maltose agar	-	500 g	**1.05439.0500**
Salmonella enrichment broth (MKTTn)	ISO	500 g	**1.05878.0500**
Salmonella enrichment broth acc. to Rappaport (RV)	-	500 g	**1.10236.0500**
Salmosyst® broth, base	-	500 g	**1.10153.0500**
Salmosyst® selective supplement, 250 tablets	-	250	**1.10141.0001**
Selective agar for pathogenic fungi	-	500 g	**1.05467.0500**
Selenite cystine enrichment broth	ISO, AOAC, APHA, DIN	500 g	**1.07709.0500**
Selenite enrichment broth acc. Leifson	-	500 g	**1.07717.0500**
SIM medium	-	500 g	**1.05470.0500**
Simmons citrate agar	-	500 g	**1.02501.0500**
Sorbitol-MacConkey agar (SMAC-Agar)	ISO, DIN, APHA	500 g	**1.09207.0500**
SS agar salmonella shigella agar	APHA	500 g	**1.07667.0500**
Standard count agar	-	500 g	**1.01621.0500**
Standard II nutrient agar	-	500 g	**1.07883.0500**
Standard I nutrient agar	-	500 g	**1.07881.0500**
Standard I nutrient agar	-	5 kg	**1.07881.5000**
Standard I nutrient broth	-	500 g	**1.07882.0500**
Staphylococcus enrichment broth acc. to Baird (base)	-	500 g	**1.07899.0500**
Sulphite iron agar (base)	-	500 g	**1.10864.0500**
Sulphite polymyxin sulfadiazine agar acc. to Angelloti	-	500 g	**1.10235.0500**
TB medium base acc. to Lowenstein-Jensen	-	500 g	**1.05400.0500**
TCBS-agar (vibrio selective agar)	-	500 g	**1.10263.0500**
Terrific broth	-	500 g	**1.01629.0500**
Test agar pH 6.0 for the inhibitor test	-	500 g	**1.10663.0500**
Test agar pH 8.0 for the inhibitor test	-	500 g	**1.10664.0500**
Tetrathionate broth (base) acc. to Muller-Kaufmann	ISO	500 g	**1.10863.0500**
Tetrathionate broth base (USP)	DIN, AOAC, APHA	500 g	**1.05285.0500**
TGE agar (tryptone-glucose-meat-extract-agar)	AOAC, APHA	500 g	**1.10128.0500**
Thioglycollate broth	USP	500 g	**1.08190.0500**
Thioglycollate broth	USP	5 kg	**1.08190.5000**
Tryptic soy agar (CASO)	AOAC, BAM, COMPF, EP	500 g	**1.05458.0500**
Tryptic soy agar (CASO)	ISO, SMD, SMNW, USP	5 kg	**1.05458.5000**
Tryptic soy broth, non animal (CASO)	-	5 kg	**1.00525.5000**
Tryptic soy broth (CASO)	ISO	10 kg	**1.05459.9010**
Tryptic soy broth (CASO)	ISO	5 kg	**1.05459.5000**
Tryptone salt tablets	-	100 Tab.	**1.15421.0100**
Tryptone water	APHA, ISO	500 g	**1.10859.0500**
Tryptose broth	APHA	500 g	**1.10676.0500**
TSA with polysorbate 80 and lecithin	-	500 g	**1.07324.0500**
TSB	ISO	500 g	**1.05459.0500**
TSB, irradiated	-	5 kg	**1.00800.5000**
TSB, non animal origin, irradiated	-	5 kg	**1.00550.5000**
TSC agar (tryptose sulphite cycloserine agar) (base)	DIN EN ISO 6461	500 g	**1.11972.0500**
TSN agar perfringens selective agar acc. to Marshall	-	500 g	**1.05264.0500**
Universal beer agar (UBA medium)	-	500 g	**1.00445.0500**
Urea agar (base) acc. to Christensen	-	500 g	**1.08492.0500**
Urea broth	-	500 g	**1.08483.0500**
UVM listeria selective enrichment broth, modified	AOAC, APHA	500 g	**1.10824.0500**
Vitamin B12 (lactobacillus) assay broth (Base)	-	100 g	**1.11988.0100**
VRB agar (violet red bile agar)	ISO, IDF, APHA	500 g	**1.01406.0500**
VRB agar (violet red bile agar)	ISO, IDF, APHA	5 kg	**1.01406.5000**
VRBD agar	Ph. Eur 5.6	500 g	**1.10275.0500**
WL nutrient agar	-	500 g	**1.10866.0500**
Wort agar	-	500 g	**1.05448.0500**
Wort agar	-	5 kg	**1.05448.5000**
Wort broth (base)	-	500 g	**1.05449.0500**
Wort broth (base)	-	5 kg	**1.05449.5000**
XLD agar	ISO 6579	500 g	**1.05287.0500**

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Description	Standard	Pk	Cat. No.
XLD agar (EP)	Ph.Eur 5.6	500 g	**1.05290.0500**
XLT4 agar (base)	-	500 g	**1.13919.0500**
Yeast extract agar	-	500 g	**1.03750.0500**
Yeast extract agar	DIN EN ISO 6222	500 g	**1.13116.0500**
Yeast extract agar acc Rep.71	-	500 g	**1.10126.0500**
Yersinia selective agar (base) acc. to Schiemann	ISO, APHA	500 g	**1.16434.0500**
YGC agar	IDF, ISO, DIN	500 g	**1.16000.0500**

Media for drinking water/water examination

Clean, fresh water is one of the most important issues facing humanity today. Also in the food and pharma industries the examination of water is prescribed. Granulated Media from Merck are produced under strict guidelines and quality is controlled according to ISO 11133.

- All your requirements - a wide range of dehydrated media or ready to use media such as Merckoplate® together with suitable filtering systems
- High quality products at economical prices
- All media comply with ISO standards

Description	Standard	For	Pk	Cat. No.
Lactose TTC agar with tergitol	DIN EN ISO 9308-1	E.coli/Coliforms	500 g	**1.07680.0500**
TTC (2,3,5-triphenyltetrazolium chloride)	DIN EN ISO 9308-1		10 g	**1.08380.0010**
TTC (2,3,5-triphenyltetrazolium chloride)	DIN EN ISO 7899-2		100 g	**1.08380.0100**
DEV nutrient agar	DIN EN ISO 6222		500 g	**1.11471.0500**
Chromocult TBX (Tryptone bile agar)	DIN EN ISO 9308-1		500 g	**1.16122.0500**

Type	Pore size (µm)	Ø (mm)	Pk	Cat. No.
Filter media: GN-6 Metricel®, hydrophilic mixed cellulose esters				
GN-6, grid, individual sterile pack (S-Pack)	0,45	47	200	**514-4202**

Ask for our Water Brochure - Microbiological examination Merck W 286135. GN-6 Cellulose filters from Pall are recommended for the examination of drinking water.

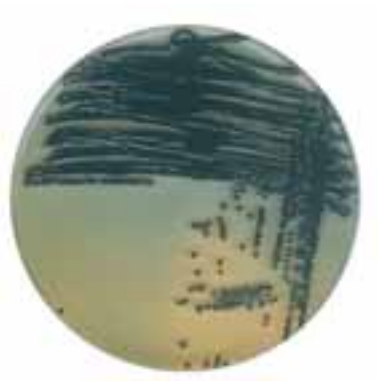
Media supplements for dehydrated culture media

The isolation of microorganisms often requires the use of selective media. The use of freeze-dried supplements ensures an optimal and standardised medium preparation and thus optimised performance of the selective medium.

- No aerosols released upon opening, therefore minimising inhalation of toxic agents
- User friendly screw caps which guarantee easy and safe opening
- Standard volumes make preparation easier

Description	Pk	Cat. No.
E. coli/Coliform selective supplement	10 Vial	**1.00898.0010**
Bacillus cereus selective supplement	10 Vial	**1.09875.0010**
Bolton broth selective supplement	10 Vial	**1.00079.0010**
CAYE broth supplement	10 Vial	**1.00051.0010**
CCDA selective supplement	10 Vial	**1.00071.0010**
Clostridium perfringens selective supplement	10 Vial	**1.00888.0010**
CT supplement	10 Vial	**1.09202.0010**
Fraser Listeria ammonium iron(III) supplement	10 Vial	**1.00092.0010**
Fraser Listeria supplement	10 Vial	**1.00093.0010**
Listeria selective enrichment supplement	10 Vial	**1.11781.0010**
MSRV selective supplement	10 Vial	**1.09874.0010**
MUP selective supplement	10 Vial	**1.00045.0010**
OGY selective supplement	10 Vial	**1.09877.0010**
Oxford Listeria selective supplement	10 Vial	**1.07006.0010**
Palcam Listeria selective supplement	10 Vial	**1.12122.0010**
Pseudomonas CFC selective supplement	10 Vial	**1.07627.0010**
Pseudomonas CN selective supplement	10 Vial	**1.07624.0010**
UVM II supplement	1 Vial	**1.04039.0001**
XLT4 agar supplement, 100 ml	1	**1.08981.0100**
Yersinia selective supplement (C.I.N.)	16 Vial	**1.16466.0001**

Rapidcult™ E. coli enrichment broth



Rapidcult™ E. coli enrichment broth reduces time to result for EHEC testing significantly. The Rapidcult™ E. coli enrichment broth is a medium for enriching pathogenic *E. coli* including *E. coli* O157 from food samples, especially from ground beef and beef trim. It reconciles scarce time with high reliability. Rapidcult™ E. coli's validation is consistent with USDA-FSIS when used in combination Singlepath® E. coli O157 lateral flow tests. *E. coli* O157 is not the only pathogenic *E. coli*. Other verotoxin-producing *E. coli* (EHEC) are dangerous as well. Initial results showed that with Rapidcult™ E. coli enrichment broth, it is possible to enrich other serotypes of pathogenic *E. coli* from different food sample materials, such as vegetables, apple juice or milk and dairy products. After enrichment of the sample it is possible to choose different microbiological methods for detection depending on the desired time to result. Quality control process meets ISO 11133 guidelines.

- Fast- can reduce time to result from more than 18 hours down to 8-12 hours
- Flexible - allows you to incubate for 12 hours or less up to 22 hours to fit with your optimal workflow
- Efficient - shorter times to result means shorter times of food quarantine; food reaches customer fresher
- High yield - increased growth of *E. coli* due to special composition
- Reliable - validation is consistent with USDA-FSIS guidance
- High-quality - granulated for maximum safety and convenience

Description	Pk	Cat. No.
Rapidcult™ E. coli enrichment broth	500 g	**1.00026.0500**

Dehydrated culture media

A range of culture media in compliance with ISO standards and the International Harmonised Pharmacopoeia. All our media are, as you would expect, produced using high quality raw materials and are subject to strict quality controls, in a production environment following Good Manufacturing Practice guidelines. Raw materials are selected in compliance with the required standards. Dehydrated culture media should be stored at 10-30 °C unless otherwise stated, in their closed containers in a dry environment. Standard pack size is 500 g.

- Compliant with international standards, such as ISO and Pharmacopoeia
- Media growth promotion testing performed in compliance with Pharmacopoeias and ISO 111331-2 standard
- Available in standard formulations and animal-free
- Custom products available

Description	Standard	Pk	Cat. No.
Bacteriological agar	-	5 kg	**84609.5000**
Baird Parker agar base	ISO 5944, 6888-1 and 22718 Standards	500 g	**84664.0500**
Blood agar base	-	500 g	**84619.0500**
Brain heart infusion broth	-	500 g	**84626.0500**
Brilliant green agar	-	500 g	**84631.0500**
Brilliant green agar modified (Brilliant green phenol red lactose agar)	-	500 g	**84634.0500**
Buffered peptone water	ISO 6579, 11290-2, 6887-1	500 g	**84600.0500**
Buffered peptone water	ISO 6579, 11290-2, 6887-1	5 kg	**84600.5000**
Buffered sodium chloride peptone broth	Ph. Eur., USP, JP	500 g	**84605.0500**
Campylobacter blood-free medium base Bolton (mCCDA)	ISO 10272	500 g	**84695.0500**
Campylobacter Bolton broth base (modified CCDA)	ISO 10272	500 g	**84697.0500**
Campylobacter Karmali medium agar base	-	500 g	**84696.0500**
Columbia agar base	Ph.Eur., USP, JP	500 g	**84621.0500**
DG 18 agar base	ISO 21527-2	500 g	**84632.0500**
Dichloran rose bengal chloramphenicol (DRBC) agar	ISO 21527-1	500 g	**84670.0500**
EC broth	ISO 7251, 9308-2	500 g	**84627.0500**
Endo les agar	-	500 g	**84645.0500**
Fecal coliforms agar (m-FC agar)	-	500 g	**84644.0500**
Fraser broth base	ISO 11290	500 g	**84611.0500**
Fraser broth base	ISO 11290	5 kg	**84611.5000**
KF streptococcus agar base (m - azide maltose agar KF)	-	500 g	**84633.0500**
Lactose TTC tergitol® 7 agar (Chapman TTC agar)	Ph.Eur.	500 g	**84657.0500**
Lauryl sulphate broth	ISO 7251, ISO 4831	500 g	**84639.0500**
LB broth (Miller)	-	500 g	**84649.0500**
Legionella CYE agar base	ISO 11731	500 g	**84629.0500**
Letheen broth modified	ISO 21149, 22717 and 22718 Standards	500 g	**84673.0500**
Listeria buffered enrichment broth base	-	500 g	**84652.0500**
Listeria enrichment broth	-	500 g	**84606.0500**

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Description	Standard	Pk	Cat. No.
Listeria selective agar supplement according to Ottaviani & Agosti	ISO 6579	500 g	**84748.0500**
MacConkey agar	Ph. Eur., USP, JP	500 g	**84614.0500**
Malt extract agar no. 2	-	500 g	**84665.0500**
Malt extract broth	-	500 g	**84666.0500**
Mannitol egg yolk polymyxin agar base – MYP agar acc. to Mossel	ISO 7932, ISO 21871	500 g	**84635.0500**
Mannitol salt phenol-red agar	Ph. Eur., USP, JP	500 g	**84622.0500**
Maximum recovery diluent	ISO 6887	500 g	**84617.0500**
Milk plate count agar	DIN/IDF	500 g	**84643.0500**
MRS agar	ISO 15214	500 g	**84607.0500**
MRS broth	-	500 g	**84613.0500**
Mueller-Hinton broth	CLSI(NCCLS)/CMPH	500 g	**84648.0500**
Muller-Kauffmann tetrathionate-novobiocin broth (MKTTN)	ISO 6785	500 g	**84624.0500**
Nutrient agar DEV	ISO 6222, TWV 2001	500 g	**84749.0500**
Nutrient agar n°1	-	500 g	**84654.0500**
Nutrient broth	APHA and ISO 6340, 6569, 6785, 8523, 10273 and 16266	500 g	**84662.0500**
Orange serum agar	IFU Methods	500 g	**84646.0500**
Oxford agar base	ISO 11290	500 g	**84630.0500**
Oxytetracycline-glucose-yeast extract agar base (OGYE agar)	ISO 13681	500 g	**84659.0500**
Palcam agar base	ISO 11290	500 g	**84625.0500**
Plate count agar-PCA (Standard methods agar)	ISO 4833	500 g	**84608.0500**
Potato dextrose agar	Ph.Eur.	500 g	**84651.0500**
Pseudomonas agar base	ISO 13720, ISO 16266, ISO 11059	500 g	**84650.0500**
Pseudomonas selective (Cetrimide) agar	Ph. Eur., USP, JP	500 g	**84638.0500**
R2A agar	Ph.Eur.	500 g	**84671.0500**
Rappaport Vassiliadis (RSV) broth	ISO 6579 and FIL-IDF Standards	500 g	**84656.0500**
Rappaport Vassiliadis Salmonella enrichment broth	ISO 6340	500 g	**84658.0500**
Reinforced clostridial medium	-	500 g	**84699.0500**
Rose bengal chloramphenicol agar	-	500 g	**84669.0500**
Sabouraud dextrose agar	ISO 13681	500 g	**84663.0500**
Selenite cystine broth	-	500 g	**84655.0500**
TCBS agar	ISO 8914	500 g	**84641.0500**
Triple sugar iron agar	ISO 6579	500 g	**84698.0500**
Tryptic soy agar (Casein soya bean digest agar)	Ph. Eur., USP, JP	500 g	**84602.0500**
Tryptic soy agar + lecithin+Tween 80	-	500 g	**84642.0500**
Tryptic soy broth non animal origin irradiated	-	5 kg	**84674.5000**
Tryptone bile x-glucuronide agar (TBX)	ISO 16649	500 g	**84637.0500**
Tryptose sulphite cycloserine (TSC) agar	ISO 7937, ISO 15213	500 g	**84636.0500**
Urea agar base	ISO/DIN	500 g	**84653.0500**
Violet red bile glucose (VRBG) agar	ISO 21528	500 g	**84603.0500**
Violet red bile lactose (VRB) agar	ISO 4832	500 g	**84612.0500**
Wort agar	-	500 g	**84661.0500**
Wort broth	-	500 g	**84660.0500**
XLD (Xylose lysine deoxycholate) modified agar	ISO 6579 and 21567	500 g	**84667.0500**
Yeast extract	-	5 kg	**84601.5000**
Yeast extract dextrose chloramphenicol (YGC) agar	-	500 g	**84604.0500**

VWR PROLABO CHEMICALS

SELECTED FOR YOU

Media supplements for dehydrated culture media

Supplements are available in vials, each one sufficient to supplement 500 ml of medium unless otherwise stated.

• Freeze-dried

Description	Pk	Cat. No.
Bacillus cereus supplement	10 Vial	**84732.0001**
BCYE α-growth supplement	4 Vial	**84726.0001**
BCYE α-growth supplement w/o cysteine	4 Vial	**84727.0001**
Bolton broth selective supplement	10 Vial	**84744.0001**
CCD selective supplement	10 Vial	**84742.0001**
CFC selective supplement	10 Vial	**84746.0001**
Chloramphenicol	10 Vial	**84729.0001**
CN selective supplement	10 Vial	**84745.0001**
d-Cycloserine supplement	10 Vial	**84734.0001**
Egg yolk emulsion	50 ml	**84733.0001**
Fraser half selective supplement	10 Vial	**84721.0001**
Fraser selective supplement	10 Vial	**84720.0001**
Glycerol for Pseudomonas agar base	100 ml	**84730.0001**
GVPC supplement	4 Vial	**84725.0001**
Iodine iodide solution	50 ml	**84723.0001**
Karmali selective supplement	10 Vial	**84743.0001**
Novobiocin MKTT supplement	10 Vial	**84722.0001**
Oxford supplement	10 Vial	**84728.0001**

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Description	Pk	Cat. No.
Palcam supplement	10 Vial	**84724.0001**
PP selective supplement	10 Vial	**84747.0001**
TTC 1% solution	30 ml	**84731.0001**

Readycult®

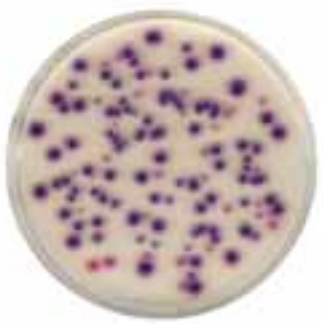
Readycult® Coliform and Readycult® Enterococci make it easy to detect coliforms, *E. coli* or faecal streptococci in water. You only need a sterile container and a UV lamp (Cat. No. 1.13203.0001).

- Easy handling: Readycult® is ready to use in a blister pack
- Quick results: Add Readycult® to the water sample straight from the blister pack, mix, incubate for 24±1 h, read result, finished!
- Safe and easy interpretation: Readycult® reliably detects even damaged organisms. Blue-green colour change shows the presence of Total coliforms, *E. coli* or Enterococci (Cat. No. 1.01299); fluorescence + indole reaction shows the presence of *E. coli*

Description	Pk	Cat. No.
Readycult® Coliforms 50*	20 Tests	**1.01295.0001**
Readycult® Coliforms 100**	20 Tests	**1.01298.0001**
Readycult® Enterococci 100**	20 Tests	**1.01299.0001**

* for 50 ml water
** for 100 ml water

Culture media, Chromocult® and Fluorocult®



Chromogenic media offer a method for rapid identification of characteristic bacterial enzymes. Merck offers a wide range of solid and liquid culture media that also permits the fluorescence detection of *E. coli* under the tradename Fluorocult®. Fluorocult® culture media have the same components as the standard media and additionally the substrate MUG. Some of the media also contain tryptophan as the substrate for a possible indole reaction to further confirm *E. coli* presence. The Fluorocult® method can produce a positive result within just 24-48 hours. In the case of the chromogenic media, a direct identification, using the characteristic colony colouring on the culture medium itself is possible without the application of further additives. A differentiation of positive single colonies is possible, even when high microbial counts are present.

- Quicker, you save 3-4 days compared with the conventional method
- Rapid identification with UV-lamp (Fluorocult®) or due to the colour (Chromocult®)
- Easy interpretation, the visualisation of a whole series of different colours of organisms in one culture medium is possible

Description	Pk	Cat. No.
Bactident® Indole	30 ml	**1.11350.0001**
Chromocult® coliform agar	500 g	**1.10426.0500**
Chromocult® coliform agar ES	500 g	**1.00850.0500**
Chromocult® enterococci agar	500 g	**1.00950.0500**
Chromocult® enterococci broth	500 g	**1.10294.0500**
Fluorocult® BRILA-broth	500 g	**1.12587.0500**
Fluorocult® DEV Lactose Peptone Broth	500 g	**1.04037.0500**
Fluorocult® E.coli 0157 H7 agar	500 g	**1.04036.0500**
Fluorocult® ECD agar	500 g	**1.04038.0500**
Fluorocult® lauryl sulphate broth	500 g	**1.12588.0500**
Fluorocult® LMX broth acc. to Manafi and Ossmer	500 g	**1.10620.0500**
Fluorocult® VRB agar	500 g	**1.04030.0500**

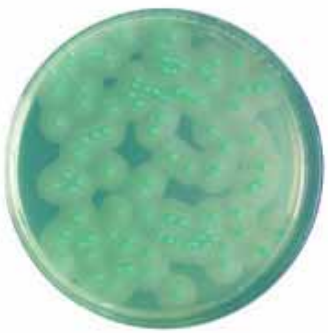
Enterobacter sakazakii agar, Chromocult®

Selective medium for the detection of *Enterobacter sakazakii* in milk powder and powdered infant formula. The base in Chromocult ® Enterobacter sakazakii agar allows good growth and strong colour formation of *E. sakazakii* colonies. The addition of inhibitors and the incubation temperature of 44 °C largely reduce the growth of the majority of gram-positive and gram-negative accompanying flora. *E. sakazakii* is ß-D-glucosidase positive and grows as blue-green colonies on this medium. Incubation: 24 ±2 hours at 44 ±1 °C. Incubation temperature has a strong influence on sensitivity and selectivity of this method. Temperatures higher than 45 °C will inhibit the growth of *E.sakazakii.* Temperatures below 43 °C will reduce inhibition of accompanying bacteria.

- Reliable, fast and safe detection of *Enterobacter sakazakii* with a chromogenic medium for a low price per plate
- Highest security - the unique chromogenic technique is the only way to detect all *Enterobacter sakazakii* safely and clearly
- Easy interpretation within 24 hours. Only *Enterobacter sakazakii* leads to turquoise coloured colonies while other bacteria are repressed or grow colourless
- Recommended by ISO 22964

Description	Pk	Cat. No.
ChromoCult ® Enterobacter sakazakii agar	100 g	**1.00873.0100**
ChromoCult ® Enterobacter sakazakii agar	500 g	**1.00873.0500**

Listeria selective agar, Chromocult®



This medium conforms to the ALOA (agar Listeria acc. to Ottaviani & Agosti) medium, a selective medium for the isolation of *Listeria monocytogenes* in food (AFNOR-validated method). It also enables the testing, sampling and enumeration of *Listeria monocytogenes* and Listeria spp. in foodstuffs and other source materials. The rich base of the Chromocult® Listeria selective agar encourages excellent growth. The supplement of inhibitors stops most of the bacteria, yeast and fungi from growing. In contrast, Listeria is uninhibited in its growth, producing blue-green colonies; *L. monocytogenes* also form an opaque halo.

- Simple, safe evaluation
- ISO 11290 reference medium, AFNOR validated
- FDA/BAM recommended

Description	Pk	Cat. No.
Chromocult® Listeria agar enrichment supplement	10	**1.00439.0010**
Chromocult® Listeria agar selective supplement	10 Vial	**1.00432.0010**
Chromocult® Listeria selective agar base acc. to Ottaviani & Agosti	500 g	**1.00427.0500**

Base materials

Merck products offer high quality for applications in the microbiology field.

- All products from one manufacturer
- Constant quality and low costs as a result of bulk buying
- Custom manufacture following customer developed protocols with excellent quality control

According DIN ISO 9001-2000 and ISO 11133.

Description	Pk	Cat. No.
Agar-agar Fermtech®	1 kg	**1.11925.1000**
Agar-agar Fermtech®	25 kg	**1.11925.9025**
Agar-agar purified and free of inhibitors, granulated	1 kg	**1.01614.1000**
Agar-agar purified and free of inhibitors, granulated	5 kg	**1.01614.5000**
Agar-agar ultrapure for excellent clarity of media, granulated	1 kg	**1.01613.1000**
Casein hydrolysate (acid hydrolysed)	500 g	**1.02245.0500**
Gelatin	500 g	**1.04070.0500**
Lactalbumin hydrolysate hydrolysed	5 kg	**1.12523.5000**
Malt extract from malted barley for yeasts and moulds	500 g	**1.05391.0500**
Meat extract dry, granulated	500 g	**1.03979.0500**
Meat extract dry, granulated	2,5 kg	**1.03979.2500**
Ox bile, dried, pure	500 g	**1.03756.0500**
Peptone from casein, pancreatically digested, free from sulphonamide antagonists	500 g	**1.02239.0500**
Peptone from casein (Tryptone), pancreatic, granulated	1 kg	**1.07213.1000**
Peptone from casein (Tryptone), pancreatic, granulated	2,5 kg	**1.07213.2500**
Peptone from casein (Tryptone), pancreatic, granulated	25 kg	**1.07213.9025**

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Description	Pk	Cat. No.
Peptone from casein (Tryptone) Fermtech®	1 kg	**1.11931.1000**
Peptone from casein (Tryptone) Fermtech®	25 kg	**1.11931.9025**
Peptone from gelatin, pancreatic	1 kg	**1.07284.1000**
Peptone from meat, pancreatic, granulated	1 kg	**1.07214.1000**
Peptone from meat, pancreatic, granulated	2,5 kg	**1.07214.2500**
Peptone from meat, peptic, granulated	1 kg	**1.07224.1000**
Peptone from meat, peptic, granulated	2,5 kg	**1.07224.2500**
Peptone from soya meal	500 g	**1.07212.0500**
Proteose-peptone for toxin production and cultivation of fastidious microorganisms like Neisseria etc.	1 kg	**1.07229.1000**
Skim milk powder	500 g	**1.15363.0500**
Tryptose	1 kg	**1.10213.1000**
Universal peptone M 66	1 kg	**1.07043.1000**
Yeast extract, granulated	500 g	**1.03753.0500**
Yeast extract, granulated	25 kg	**1.03753.9025**
Yeast extract Fermtech®	1 kg	**1.11926.1000**
Yeast extract Fermtech®	25 kg	**1.11926.9025**

Base materials for dehydrated media

The ingredients used to prepare culture media are very important because ultimately the results depend on the quality of these compounds. Raw materials should be stored at 10-30 °C unless otherwise stated, in their closed containers in a dry environment.

- Ingredients are specifically selected to ensure consistent and reproducible results
- Manufactured under the strictest cGMP standards
- Handy 500 g bottles

Description	Pk	Cat. No.
Bacteriological agar	500 g	**84609.0500**
Casein hydrolysate (acid)	500 g	**84623.0500**
Malt extract	500 g	**84618.0500**
Meat extract dry	500 g	**84688.0500**
Peptone from meat (enzymatic digest of animal tissue)	500 g	**84620.0500**
Skimmed milk powder	500 g	**84615.0500**
Soya peptone (enzymatic digest of soybean meal)	500 g	**84616.0500**
Tryptone (Peptone from casein)	500 g	**84610.0500**
Yeast extract	500 g	**84601.0500**

Media additives

Description	Pk	Cat. No.
1-Naphthol	50 g	**1.06223.0050**
1-Naphthol	250 g	**1.06223.0250**
Adonitol	5 g	**1.00846.0005**
Brilliant green (C.I. 42040)	50 g	**1.01310.0050**
Bromothymol blue indicator	5 g	**1.03026.0005**
Bromothymol blue indicator	25 g	**1.03026.0025**
D(-)-Fructose	250 g	**1.05323.0250**
D(-)Mannitol	500 g	**1.05982.0500**
D(-)-Sorbitol	1 kg	**1.07758.1000**
D(+)-Galactose	50 g	**1.04062.0050**
D(+)-Glucose monohydrate	1 kg	**1.08342.1000**
D(+)-Glucose monohydrate	2,5 kg	**1.08342.2500**
D(+)-Xylose for biochemistry	25 g	**1.08689.0025**
Dulcitol	50 g	**1.05990.0050**
Egg yolk emulsion, sterile (10x100 ml)	10	**1.03784.0001**
Egg yolk tellurite emulsion 20%, sterile (10x50 ml)	10	**1.03785.0001**
Esculin	25 g	**1.00842.0025**
Lactose-monohydrate	1 kg	**1.07657.1000**
Lactose-monohydrate	5 kg	**1.07657.5000**
Maltose monohydrate	500 g	**1.05910.0500**
Myo-Inositol	100 g	**1.04728.0100**
Neutral red indicator	25 g	**1.01369.0025**
Neutral red indicator	100 g	**1.01369.0100**
Potassium tellurite trihydrate	100 g	**1.05164.0100**
Ringer tablets (100x500 ml)	100	**1.15525.0001**
Saccharose	1 kg	**1.07651.1000**
Saccharose	5 kg	**1.07651.5000**
Salicin	25 g	**1.07665.0025**
Sodium deoxycholate	250 g	**1.06504.0250**

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Description	Pk	Cat. No.
Sodium hydrogen selenite	50 g	**1.06340.0050**
Sodium thioglycollate	500 g	**1.06691.0500**
Trehalose	5 g	**1.08353.0005**
TTC (2,3,5-triphenyltetrazolium chloride)	10 g	**1.08380.0010**
TTC (2,3,5-triphenyltetrazolium chloride)	100 g	**1.08380.0100**
Urease	10 ml	**1.16493.0010**

VWR COLLECTION

Delivering high quality and superior performance

Please contact your local VWR sales office or go to vwr.com for the latest news and special offers

Culture media, ready to use, in plates

For various microbiological applications. The special packaging of the 55 mm plates has several advantages: good protection of the plates during transport and storage, can be reused to transport the plates after use and is recyclable (PET). The plates can be stored from 2 up to 25 °C.

- Packed under cleanroom conditions to avoid contamination
- Manufactured with formulations that follow specifications of the various Pharmacopoeias and ISO regulations
- Special packaging for 55 mm plates

Packaging: The cellophane bag packaging have a special boxes of 30 plates (55 mm plates). They are delivered 1×30 or 3×30. 90 mm plates are delivered 1×20 or 6×20.

Description	Standard	Filling	Pk	Cat. No.
Plates 55 mm				
Bile Aesculin azide agar	ISO 7899-2:2001	12 ml	30	**170082UA**
Cetrimide agar	EP, USP	12 ml	30	**170793ZA**
Cetrimide agar (CN)	ISO 12780:2002	12 ml	30	**170793NA**
Chromocult® Coliform agar	-	12 ml	30	**171274ZA**
Chromocult® Enterococci agar	-	12 ml	30	**171284ZA**
DEV agar	acc. to the German Standard Methods	12 ml	30	**173554ZA**
MacConkey agar	-	12 ml	30	**170641ZA**
Mannitol agar	Harm Ph	12 ml	30	**170560ZA**
M-CP agar	-	12 ml	30	**171400ZA**
M-FC agar	-	12 ml	30	**171380ZA**
M-Green agar	-	12 ml	30	**171300ZA**
Nutrient agar	-	12 ml	30	**170692ZA**
Orange Serum agar	-	12 ml	30	**170731ZA**
PCA	ISO 4833, EPA	10 ml	30	**170774ZA**
R2A agar	EP	10 ml	30	**170802ZI**
Sabouraud 4% chloramphenicol agar	Harm Ph	10 ml	30	**170884CF**
Sabouraud 4% dextrose agar	Harm Ph	12 ml	30	**170884ZA**
Slanetz & Bartley agar	ISO 7899-2	10 ml	30	**170980ZA**
SPS agar	-	12 ml	30	**171320ZA**
Tergitol-7 agar	ISO 9308-1	12 ml	30	**171023ZA**
Tryptone yeast agar	ISO 6222:1999	12 ml	30	**171250ZA**
TSA agar	Harm Ph	12 ml	30	**171114ZA**
Plates 90 mm				
Baird Parker agar	EP, USP, ISO	19 ml	20	**AX051103**
Baird-Parker agar	ISO 6888-1:1999	20 ml	20	**100063UA**
Baird-Parker RPF agar	ISO 6888-2	20 ml	20	**102950IM**
Bile Aesculin azide agar	ISO 7899-2:2001	20 ml	20	**100082XA**
Bismuth sulphite agar	-	22 ml	20	**102770ZA**
BPLS agar acc. to Kristensen (brilliant green, phenol red, lactose, sucrose)	acc. potable water, Spanish legislation	20 ml	20	**100121ZA**
Campylobacter blood-free CCDA agar	ISO 10272:2006	20 ml	20	**100191ZF**
Cetrimide agar	Harm Ph	20 ml	20	**100793ZA**
Chocolate agar with supplement (VITOX)	-	20 ml	20	**101591ZF**
Chromocult® E. coli agar	-	20 ml	20	**101274ZA**
Columbia sheep blood + ANC	Harm Ph	20 ml	20	**100253NF**
Columbia sheep blood agar	Harm Ph	20 ml	20	**100253ZF**
CT-SMAC (*E.coli* 0:157) agar	-	20 ml	20	**100683AA**
DG 18 metal agar	-	20 ml	20	**102310XF**
Dichlor. Rose Bengal chloramp. agar	-	20 ml	20	**103660XF**
EMB agar	ISO 21150:2006	20 ml	20	**100331ZA**
Hektoen enteric agar	-	20 ml	20	**100371ZA**
Lactose TTC agar Tergitol-7	ISO 9308-1	20 ml	20	**101023ZA**
Lecithin polysorbate triton x agar	-	20 ml	20	**101114SA**
Legionella BCYE	-	20 ml	20	**100460ZF**
Legionella BCYE non Cysteine	ISO 11731:1998	20 ml	20	**100460XF**
Legionella GVPC	ISO 11731:1998	20 ml	20	**100460GF**
Listeria selective agar ALOA	ISO 11290-1+2	20 ml	20	**102898KA**
MacConkey agar	Harm Ph	20 ml	20	**100641ZA**
Malt extract agar	-	20 ml	20	**100544ZA**
Malt extract metal agar	-	20 ml	20	**100544XA**
Mannitol salt agar	Harm Ph	20 ml	20	**100560ZA**
MRS +sorbic acid agar	-	20 ml	20	**100582XA**
MRS agar	-	20 ml	20	**100582ZA**
MRS cysteine agar	-	20 ml	20	**100582JA**

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Description	Standard	Filling	Pk	Cat. No.
Plates 90 mm				
Mueller Hinton blood agar	-	20 ml	20	**100613IF**
MYP agar with polymyxin B, egg yolk	-	20 ml	20	**100053UA**
OGYE agar	ISO 13681:1995	20 ml	20	**100720ZA**
Palcam agar	EN ISO 11290-1,11290-2	20 ml	20	**100742ZA**
PCA without glucose	-	20 ml	20	**AX051165**
Plate count agar	UNE-EN ISO 4833:2003	20 ml	20	**100774ZA**
Potato dextrose agar	Harm Ph	20 ml	20	**100782ZA**
Potato dextrose agar	-	20 ml	20	**AX051132**
Rambach® agar	-	20 ml	20	**101294ZA**
Rose bengal agar	-	20 ml	20	**100070ZA**
S.P.S. agar	-	20 ml	20	**101320ZA**
Sabouraud 2% chloramphenicol actidione agar	Harm Ph	20 ml	20	**100884DA**
Sabouraud 4% dextrose chloramphenicol agar	Harm Ph	20 ml	20	**100884CF**
Sabouraud 4% glucose agar	EP, USP	20 ml	20	**100884ZA**
Salmonella Shigella agar	-	20 ml	20	**100911ZA**
Sheep blood polymyxin agar	-	20 ml	20	**100250DF**
Slanetz & Bartley enterococci agar	ISO 7899-2:2000	20 ml	20	**100980ZA**
Standard I nutrient agar	-	20 ml	20	**100692ZA**
TBX agar	-	20 ml	20	**101004ZA**
TCBS cholera agar	-	20 ml	20	**101011ZA**
Thayer Martin agar	-	20 ml	20	**100353OF**
TLH Standard I agar	-	20 ml	20	**111110TI**
TSA	Harm Ph	20 ml	20	**101114ZA**
TSA tryptic soy agar +5% sheep blood	Harm Ph	20 ml	20	**101114IF**
TSA with natamycin 0,1 g/l agar	-	20 ml	20	**111114NF**
TSC agar	UNE EN 13401 and UNE EN 26461-2	20 ml	20	**101141AA**
TSN agar	-	20 ml	20	**101370ZA**
VRB agar	EP	20 ml	20	**101183ZA**
VRBD agar	Harm Ph	20 ml	20	**101203ZA**
Wort agar	-	20 ml	20	**112321TA**
XLD agar	Harm EP, USP, JP	20 ml	20	**101241ZF**
XLD novobiocin agar	Harm Ph	20 ml	20	**101241AF**
XLT4 agar	-	20 ml	20	**101874ZA**

Ready to use plates, 90 mm

The product range includes a full line of pre-poured 90 mm Petri dishes for a wide range of different applications, such as enumeration, isolation, detection and cultivation of bacteria as well as yeast and moulds. In order to choose the best packaging for each kind of use, both small packs of 20 plates and bulk packs of 100 plates are available for each kind of plate.

- Ready to use media in 90 mm Petri dishes
- Item number and the expiry date are imprinted on every plate for safe and easy product identification and shelf life monitoring

Packaging: 2 or 10 sets of 10 shrink-wrapped plates

Description	Standard	Pk	Cat. No.
Baird Parker agar	EP	20	**1461370020.**
Baird Parker agar	EP	100	**1461370100.**
Cetrimide agar	EP	20	**710-1578**
Cetrimide agar	EP	120	**710-1579**
Cetrimide agar		20	**1460780020.**
Chromocult Coliform agar	-	20	**1466890020.**
Citrate azide tween agar (CATC)	-	20	**1462220020.**
Coli-2G-agar	-	20	**1460390020.**
Coli-2G-agar	-	100	**1460390100.**
Columbia blood agar	EP	100	**1465590100.**
Dermatophyte agar acc to Taplin	-	20	**1460890020.**
DG 18 agar	-	20	**1461610020.**
DG 18 agar	-	100	**1461610100.**
Fungi agar acc. to Kimmig	-	20	**1461060020.**
Fungi agar acc. to Kimmig	-	100	**1461060100.**
Lactose TTC agar with Tergitol-7	-	20	**1461850020.**
Lactose TTC agar with Tergitol-7	-	100	**1461850100.**
Listeria agar (chromogenic)	ISO	20	**1461860020.**
MacConkey agar	EP	20	**1460660020.**
MacConkey agar	EP	100	**1460660100.**
Malt extract agar	-	20	**1461470020.**
Malt extract agar	-	100	**1461510100.**
Mannitol salt agar	-	20	**1460230020.**
Mannitol-Yolk-Polymyxin agar (MYP)	-	100	**1461600100.**
Mannitol-Yolk-Polymyxin agar (MYP)	-	20	**1461600020.**
Mininimal glucose agar, Ames Test	-	120	**1466900120.**

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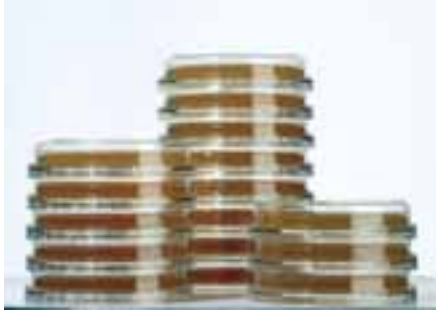
Description	Standard	Pk	Cat. No.
Plate Count agar	-	20	**1462690020.**
Plate Count agar	-	100	**1462690100.**
R2A agar	EP	20	**1460750020.**
R2A agar	EP	120	**1460750120.**
Rambach agar	-	20	**1460680020.**
Rambach agar	-	100	**1460680100.**
Sabouraud dextrose agar	-	120	**14606280120.**
Sabouraud dextrose agar (SDA)	EP	20	**1460280020.**
Sabouraud dextrose agar (SDA)	EP	120	**1460280120.**
Sabouraud glucose (2%) agar	-	20	**1461070020.**
Sabouraud glucose (2%) agar	-	100	**1461070100.**
Sabouraud glucose agar with LTHTh	-	20	**1460520020.**
Sabouraud glucose agar with LTHTh	-	120	**1460520120.**
Selective agar for pathog. fungi	-	20	**1461580020.**
Standard I nutrient agar	-	20	**1462560020.**
Standard I nutrient agar	-	100	**1462560100.**
Tryptone soya agar (TSA)	EP, USP	20	**1464310020.**
Tryptone soya agar (TSA)	EP, USP	100	**1464310100.**
Tryptone soya agar (TSA) w. LTH - LI	-	120	**1460150120.**
Tryptone soya agar (TSA) with LTH - LI	-	20	**1460150020.**
TSA	-	120	**1460040120.**
VRBD agar	-	20	**1461270020.**
VRBD agar	-	100	**1461270100.**
VRBG	-	20	**1460000020.**
XLD agar	EP, USP	20	**1461260020.**
XLD agar	EP, USP	100	**1461260100.**

Ready-to-use media, Merckoplate®

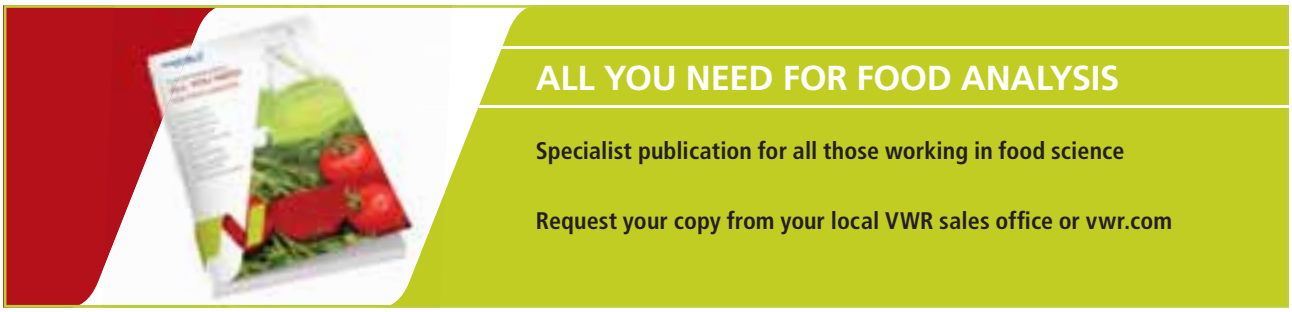


The Merckoplate® product range includes a full line of pre-poured media for a wide range of different applications, such as enumeration, isolation, detection and cultivation of bacteria as well as yeast and moulds. In order to reduce waste, bulk packs of 480 plates are available for customers with high plate throughput. The majority of Merckoplate® products can be stored at a temperature below 15 °C, although, in order to minimise condensation, the optimal storage temperature is 12 °C to 15 °C (Do not freeze!).

- Ready to use media in 90 mm Petri dishes
- Item number and the expiry date are imprinted on every plate for safe and easy product identification and shelf life monitoring

Packaging: 4 or 96 sets of 5 shrink-wrapped plates

Description	Filling	Pk	Cat. No.
Chromoplate® listeria selective agar Ottaviani and Agosti	18 ml	480	**1.00420.0480**
Malt extract agar with chloramphenicol and gentamycin	20 ml	480	**1.13423.0480**
Malt extract pH 4,3	18 ml	480	**1.18365.0001**



Media for use in media fill test

Validation of aseptic processing should include a simulation test using a nutrient medium, known as the media fill test or media simulation test. The selection of the nutrient medium should be made based on the quantity of the product produced and the selectivity, clarity, concentration and suitability for sterilisation of the nutrient medium. The process simulation test should imitate as closely as possible the routine aseptic manufacturing process and include all the critical subsequent manufacturing steps. Normally process simulation tests should be repeated twice a year per shift and process. The number of containers used for media fills should be sufficient to enable a valid evaluation. For small batches, the number of containers for media fills should at least equal the size of the product batch.

- Ready to use media saves time
- Decreases the risks associated with media preparation
- Guarantees filtration through a 0.2 µm membrane
- Sterility and fertility according to international requirements and guidelines for validation of media fill
- The medium is irradiated, BSE-free and mycoplasma-free certified, complying with the recommendations of USP XXVI (2003) and EP (1999)

Delivery information: Batch size is 500 litres, each batch is tracked by the following documentation: Certificates of origin, filterability studies, comparative fertility studies, sterility and conformity certificates. Each bag or bottle is double wrapped.

Description	Pk	Cat. No.
Media for Media Fill Test, bag with connectors	10 l	**AX0110087**
Media for Media Fill Test, bottle	1 l	**AX0110086**

Media in bottles and tubes, Merckotube®

1.18419.0010

1.18428.0025

The Merckotube® product range includes a full line of ready to use culture media in bottles and tubes for a broad range of applications, e.g. selective/non selective enrichment, isolation, cultivation and enumeration of bacteria as well as yeasts and moulds. The Merckotube® product line is produced with great care to ensure that the products are of high quality. Storage temperature for most of the products is in the range 15 - 25 °C.

- Tamper-proof screw caps
- High quality of media
- Variety of bottles and tubes

Certificates e.g. CoA in line with ISO 11133 part 1 and 2, BSE certificate, etc. will be provided.

Packaging: 10 glass bottles per pack, 25 glass tubes per pack.

Description	Volume (ml)	Pk	Cat. No.
1/2 FRASER broth, all antibiotics included	225	10	**1.18445.0010**
Bottles			
Chromocult® Coliform agar	200	10	**1.18441.0010**
Lactose broth	100	10	**1.18421.0010**
MacCONKEY broth	100	10	**1.18422.0010**
MOSSEL broth	100	10	**1.18423.0010**
MOSSEL broth	10	25	**1.18428.0025**
Orange serum agar	200	10	**1.18432.0010**
Peptone water (buffered)	225	10	**1.18436.0010**
Plate count agar	200	10	**1.18433.0010**
RVS broth	10	25	**1.18449.0025**
Sabouraud 4% dextrose agar	200	10	**1.18425.0010**
Sodium chloride peptone broth (buffered)	100	10	**1.18424.0010**
Tryptic soy agar	200	10	**1.18420.0010**
Tryptic soy broth	100	10	**1.18419.0010**
Tryptic soy broth	9	25	**1.18427.0025**
Tubes			
VRB agar	200	10	**1.18439.0010**
VRBD agar	200	10	**1.18440.0010**
YGC agar	200	10	**1.18443.0010**

Culture media, ready to use, in tubes

For various microbiological uses.

- Storage at room temperature for selected media
- Compact packaging, tubes are fitted with aluminium screw caps

Packaging: 1×20, 6×20

Description	Standard	Filling	Pk	Cat. No.
Azide broth (Rothe)	-	10 ml	20	690042ZA
Brain heart infusion broth	-	10 ml	20	600113ZA
Brillant green 2% bile broth	APHA, AWWA	10 ml	20	730144WA
Brillant green 2% bile broth, Durham tubes 16×112 mm	ISO 4831:2006	5 ml	20	650144ZA
Brillant green bile broth	APHA, AWWA	9 ml	20	690144ZA
Buffered peptone water	ISO 6579, ISO 8523, ISO 6785	9 ml	20	610173ZA
Buffered peptone water 0,1%	-	10 ml	20	601314ZA
Buffered peptone water 0,1%	Harm Ph	9 ml	20	611314ZA
E.C.broth, Durham tube 16×112 mm	-	9 ml	20	601450ZA
EE Mossel broth	Harm Ph	9 ml	20	600304ZA
Fluorocult ® LMX broth modified	-	2 ml	20	602524ZF
Fraser broth	-	10 ml	20	600343ZF
Giolitti Cantoni broth	-	9 ml	20	610360ZF
Giolitti Cantoni broth	-	19 ml	20	710360ZF
Giolitti Cantoni broth	-	10 ml	20	790360WF
Indole ornithine motility medium	-	9 ml	20	651820ZA
Kanamycin Aesculin broth	-	9 ml	20	611830ZA
Kligler agar, slope	-	7,5 ml	20	640431ZA
Lactose broth	EP, USP, EPA	9 ml	20	690440ZA
Lauryl sulphate broth	-	9 ml	20	690450ZA
Lauryl sulphate broth	ISO 5541-2, 4841	10 ml	20	890450WA
Lauryl sulphate broth, Durham tubes 16x112 mm	ISO 4831:2006	9 ml	20	650450ZA
Lauryl sulphate broth MUG, Durham	-	9 ml	20	690450XA
Letheen broth	FDA	10 ml	20	601580ZA
Letheen broth	-	9 ml	20	611585ZA
Löwenstein-Jensen medium	-	6,4 ml	20	640504ZA
Lysine iron agar, slope	-	7,5 ml	20	640511ZA
MacConkey broth	Harm Ph	9 ml	20	690674ZA
Maximum recovery diluent	ISO 6887-1	9 ml	20	613120ZA
M broth	-	9 ml	20	613270ZA
MKTTn broth acc. to ISO 6579	ISO 6579	10 ml	50	AX011184
MRS broth	-	10 ml	20	600592ZA
MRS broth, Durham tube	-	9 ml	20	690592ZA
Mueller-Kauffmann Tetrathionate broth	ISO 6579:2002	10 ml	20	601030ZA
O/F glucose medium	-	10 ml	20	651810ZA
Orange serum agar	-	20 ml	20	730731ZA
Orange serum agar acid	-	9 ml	20	730733IA
Palcam broth	-	10 ml	20	601410ZF
PCA	ISO 4833	15 ml	20	730774ZA
Peptone water	ISO 7251	9 ml	20	610753ZA
Pharmacopoeia diluent with neutralising agent (DNP)	-	9 ml	50	AX011158
Rappaport Vassiliadis broth	ISO 6579	10 ml	50	AX011124
Rappaport Vassiliadis broth	ISO 6579:2002	10 ml	20	600834ZA
Ringer solution	-	9 ml	50	AX011139
Ringer solution	-	10 ml	20	601770ZA
Ringer solution	-	9 ml	20	611770ZA
RVS broth	EP, USP, JP, Harm Ph	10 ml	20	603552ZA
Sab. chloramphenicol agar	-	7 ml	20	640884CA
Sabouraud broth	Harm Ph	9 ml	20	600894ZA
Selenite broth	-	10 ml	20	600944ZA
Selenite cystine broth	ISO 6579	10 ml	20	600954ZA
Simmons citrate agar	-	6 ml	20	640971ZA
SPS agar (Perfringens selective agar)	-	10 ml	20	601320ZA

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Description	Standard	Filling	Pk	Cat. No.
SPS agar DC	-	10 ml	20	761320WA
SPS agar with paraffin (Perfringens selective agar)	-	10 ml	20	601320XA
Thioglycollate medium USP	Harm Ph	9 ml	20	621051ZA
Todd Hewitt with antibiotic	-	10 ml	20	601060AA
Tryptone water	ISO 7251	9 ml	20	601083ZA
Tryptone yeast extract agar	ISO 6222:1999	15 ml	20	731250ZA
TSA tryptic soy agar	EP, USP, ISO 9308-1	15 ml	50	AX011101
TSA tryptic soy agar, slope	Harm Ph	6,5 ml	20	641114ZA
TSB tryptic soy broth	EP, USP, ISO 9308-3	9 ml	50	AX011176
TSB tryptic soy broth	USP, FDA and Eu Ph	10 ml	20	601121ZA
TSB tryptic soy broth	USP, FDA, Eu Ph	9 ml	20	611121ZA
TSB tryptic soy broth	USP, FDA and Eu Ph	15 ml	20	751121ZA
TSB tryptic soy broth with neutralisers TLHTh	-	10 ml	20	721115TA
TSI, slope	ISO 6579:2002	7,5 ml	20	641071ZA
TSN agar	-	9 ml	20	601370ZA
Tyrobutyricum broth	-	9 ml	20	601353ZA
Urea broth	-	2 ml	20	661161ZA
Violet red bile glucose agar (VRBG)	Harm Ph	15 ml	20	731203ZA
VP-RM broth	-	10 ml	20	600531ZA

VWR COLLECTION

SELECTED FOR YOU

Culture media, ready to use, in bottles

Ready to use culture media for microbiological test requirements in the food industry, water, environmental control and in the pharmaceutical industry. The range is manufactured from high quality raw materials. All the culture media are manufactured using selected dehydrated bases, and comply with various standards. All media are produced using the latest technology and are subject to strict quality controls carried out by qualified microbiologists.

- Storage at room temperature for selected media
- Supplied in glass bottles with different screw caps (10, 2×10, 4×10)
- Certificate of Analysis, which guarantees product conformity

Description	Standard	Filling	Size	Cap	Pk	Cat. No.
Antibiotic agar 10	-	200 ml	250	-	10	454810ZA
Antibiotic agar control pH 6.0	-	100 ml	150 ml	Aluminium	10	AX021189
Antibiotic agar control pH 8.0	-	100 ml	150 ml	Aluminium	10	AX021197
Antibiotic medium A	EP	200 ml	250 ml	Aluminium	6	AX021205
Antibiotic medium B	EP	200 ml	250 ml	Aluminium	6	AX021206
Antibiotic medium E	-	200 ml	250 ml	Aluminium	6	AX022241
Baird Parker agar base	-	90 ml	125	Aluminium	10	312950ZA
Baird Parker agar base	-	180 ml	250	Aluminium	10	430063ZA
Beerens dilution	-	100 ml	125	Aluminium screw outer cap + elastomer inner septum	10	302240ZA
Beerens dilution	-	90 ml	125	Aluminium screw outer cap + elastomer inner septum	10	312240ZT
BHI broth mod.	-	100 ml	125	Aluminium screw outer cap + elastomer inner septum	10	303415ZA
Bile esculin azide agar	ISO 7899-2	200 ml	250 ml	Aluminium	6	AX022293
Bioburden broth	-	100 ml	125	-	10	304750OA
Bolton broth (base)	-	200 ml	250	-	10	563390ZF
Buffered peptone water	ISO 6579, ISO 8523 and ISO 6785	100 ml	125	Plastic screw inner cap + elastomer septum + protective outer cap + shrink wrapped plastic sleeve	10	300173ZA
Buffered peptone water	ISO 6579, ISO 8523 and ISO 6785	90 ml	125	Plastic screw inner cap + elastomer septum + protective outer cap + shrink wrapped plastic sleeve	10	310173ZA
Buffered peptone water	ISO 6579, ISO 8523 and ISO 6785	225 ml	250	Aluminium screw outer cap + elastomer inner septum	10	400173ZA

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Description	Standard	Filling	Size	Cap	Pk	Cat. No.
Buffered peptone water	ISO 6579, ISO 8523, ISO 6785	225 ml	500	Aluminium screw outer cap + elastomer inner septum	10	**410173ZA**
Buffered peptone water	ISO 6579, ISO 8523, ISO 6785	200 ml	250	Aluminium screw outer cap + elastomer inner septum	10	**450173ZA**
Buffered peptone water 0,1%	Harm Ph	100 ml	125	Plastic screw inner cap + elastomer septum + protective outer cap + shrink wrapped plastic sleeve	10	**301314ZA**
Buffered peptone water 0,1%	Harm Ph	90 ml	125	Plastic screw inner cap + elastomer septum + protective outer, cap + shrink wrapped plastic sleeve	10	**311314ZA**
Buffered peptone water 0,1%	Harm Ph	300 ml	500	Aluminium screw outer cap + elastomer inner septum	10	**531314ZA**
Buffered peptone water 0,1%	-	50 ml	100	-	8	**881314ZA**
Buffered peptone water 0.1 %	-	450 ml	500	Aluminium screw outer cap + elastomer inner septum	10	**561314ZA**
Buffered peptone water 10% Tween	Harm Ph	100 ml	125	Aluminium screw outer cap + elastomer inner septum	10	**303480TA**
Butterfield buffer	-	100 ml	125	Aluminium screw outer cap + elastomer inner septum	10	**303610ZA**
Cetrimide agar	EP, USP	100 ml	150 ml	Aluminium	10	**AX021182**
Cetrimide agar	EP, USP	200 ml	250 ml	Aluminium	6	**AX022222**
Chromocult Coliform agar	-	200 ml	250	Aluminium screw outer cap + elastomer inner septum + shrink wrapped plastic sleeve	10	**401274ZH**
Czapek Dox metal agar	-	450 ml	500	-	10	**530274XA**
DEV lactose peptone broth	-	50 ml	125	-	10	**373564ZA**
DEV nutrient agar	-	100 ml	200	-	10	**300692ZA**
DEV nutrient agar	German Drinking Water Regulations	200 ml	250	Non injectable cap	10	**453554ZA**
Dextrose Tryptone agar (DTA)	-	100 ml	125	-	10	**303525ZA**
EE broth, Mossel	EP	90 ml	150 ml	Aluminium screw outer cap + elastomer inner septum	10	**AX029148**
EE broth acc. Mossel	EP, USP, JP	90 ml	150	Aluminium screw outer cap + elastomer inner septum	10	**AX021380**
EE broth acc. Mossel	EP	100 ml	150	Aluminium screw outer cap + elastomer inner septum + shrink wrapped plastic sleeve	10	**300304ZA**
EE broth acc. Mossel	Harm Ph	90 ml	125	Aluminium screw outer cap + elastomer inner septum	10	**310304ZA**
Fluid D	Harm Ph	400 ml	500	Aluminium screw outer cap + elastomer inner septum + shrink wrapped plastic sleeve	10	**563200OA**
Fraser broth	ISO 11290-1:	200 ml	200	Plastic screw inner cap + elastomer septum + protective outer cap + shrink wrapped plastic sleeve	10	**400343ZF**
Fraser broth 1/2	-	225 ml	250	Plastic screw inner cap + elastomer septum + protective outer cap + shrink wrapped plastic sleeve	10	**400343VF**
FTM + resazurin (acc USP)	USP	100 ml	125 ml	Plastic screw inner cap + elastomer septum + protective outer cap + shrink wrapped plastic sleeve	10	**301051ZA**
Henkel standard	-	90 ml	200	-	10	**473040TH**
Henkel standard	-	90 ml	250	-	10	**313040TH**
Iodine-Iodide solution	ISO 6579:2002	50 ml	50 ml	-	50 ml	**499319OO**
Kanamycin aesculin azide agar	acc. To Mossel	200 ml	250	Non injectable cap	10	**451830ZA**
Lactose broth	EP, USP, EPA	100 ml	250	Aluminium screw outer cap + elastomer inner septum	10	**300440ZA**
Lactose broth	EP, USP, EPA	90 ml	150	Aluminium screw outer cap + elastomer inner septum	10	**310440ZA**
LB broth acc. to Miller	EP, USP, ISO 9308-1	100 ml	250	Alu/Septum	6	**AX021330**
LB broth acc. to Miller	-	100 ml	125	Aluminium screw outer cap + elastomer inner septum	10	**302510ZA**
Letheen agar	-	200 ml	250	-	10	**401570ZA**
Letheen broth	FDA	100 ml	125	Aluminium screw outer cap + elastomer inner septum + shrink wrapped plastic sleeve	10	**301580ZA**
Letheen broth, modified	-	90 ml	125	-	10	**302754OA**
Letheen broth, modified	FDA	90 ml	125	Aluminium screw outer cap + elastomer inner septum	10	**312760ZA**
Liquid A 0,1 %	Harm Ph	100 ml	125	Aluminium screw outer cap + elastomer inner septum	10	**301314XA**
Liquid A 0,1 %	Harm Ph	450 ml	500	Aluminium screw outer cap + elastomer inner septum	10	**561314XA**
Listeria enrichment broth (LEB)	-	225 ml	250	Aluminium screw outer cap + elastomer inner septum + shrink wrapped plastic sleeve	10	**400472XA**
Listeria enrichment broth (LEB)	-	450 ml	500	-	10	**560472ZA**
Liver meat agar	-	200 ml	250 ml	Aluminium	6	**AX022292**

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Description	Standard	Filling	Size	Cap	Pk	Cat. No.
M17 agar	-	100 ml	125	Aluminium screw outer cap + elastomer inner septum	10	**303532ZA**
MacConkey agar	EP, USP	100 ml	125	Aluminium screw outer cap + elastomer inner septum + shrink wrapped plastic sleeve	10	**300641ZA**
MacConkey broth	EP, USP	100 ml	125	Aluminium screw outer cap + elastomer inner septum + shrink wrapped plastic sleeve	10	**300674ZA**
Maximum recovery diluent	ISO 6887-1	100 ml	125	Plastic screw inner cap + elastomer septum + protective outer cap + shrink wrapped plastic sleeve	10	**313120ZA**
Maximum recovery diluent with Tween	Ph	200 ml	250	-	8	**881314TA**
Milk plate count agar	-	200 ml	250	Aluminium screw outer cap + elastomer inner septum	10	**400774XA**
Milk plate count agar	-	450 ml	500	-	10	**530774XA**
MRS agar	DIN 13721, ISO 10109	200 ml	250	Aluminium screw outer cap + elastomer inner septum	10	**400582ZA**
MYP agar base	ISO 7932:2004	90 ml	250	Aluminium screw outer cap + elastomer inner septum	10	**310053ZA**
NaCl peptone broth	ISO 6887-1	90 ml	125	Plastic screw inner cap + elastomer septum + protective outer cap + shrink wrapped plastic sleeve	10	**313155ZA**
NaCl Peptone broth+1% Tween	ISO 6887-1	100 ml	125	Plastic screw inner cap + elastomer septum + protective outer, cap + shrink wrapped plastic sleeve	10	**303151OA**
Nutrient agar	-	200 ml	250	-	10	**011642ZA**
OGYE agar	ISO 13681:1995.	200 ml	250	Aluminium screw outer cap + elastomer inner septum	10	**400720ZA**
Orange serum agar	-	100 ml	125	Aluminium screw outer cap + elastomer inner septum	10	**300733IA**
Orange serum agar	-	50 ml	125	Aluminium screw outer cap + elastomer inner septum	10	**370731ZA**
Orange serum agar	-	200 ml	250	Non injectable cap	10	**450731ZA**
PBPS 4% Tween 0,5% Lecithin	Harm Ph	90 ml	250	Aluminium screw outer cap + elastomer inner septum	10	**471314TH**
PBTL 3% Tween 0.3% Lecithin	Harm Ph	90 ml	250	Aluminium screw outer cap + elastomer inner septum	10	**471314TA**
PCA	-	100 ml	125	-	10	**300774ZA**
PCA	-	450 ml	500	Non injectable cap	10	**530774ZA**
PCA without glucose		100 ml	150 ml	Aluminium	10	**AX021264**
PCA without Glucose		200 ml	250 ml	Aluminium	6	**AX022206**
PCA with starch 2 g/l	-	200 ml	250	-	6	**AX021411**
Peptone water 0,1%	-	100 ml	125	-	10	**302252ZA**
Peptone water 0,1% with Tween	Harm Ph	100 ml	125	Plastic screw iner cap + elastomer septum + protective outer cap	10	**301314TA**
Pharmacopoeia diluent (NaCl peptone broth pH 7) Tween® 80 1%	-	90 ml	150 ml	Aluminium	10	**AX021320**
Pharmacopoeia diluent with neutralising agent (DNP)	-	90 ml	150 ml	Aluminium screw outer cap + elastomer inner septum	10	**AX021146**
Polyvalent univ. neutraliser	-	45 ml	100	-	10	**332760TA**
Potato dextrose agar	Harm Ph	200 ml	250	Aluminium screw outer cap + elastomer inner septum	10	**400782ZA**
Preston broth without blood	-	225 ml	500	Aluminium screw outer cap + elastomer inner septum	10	**401640ZA**
R2A agar	EP, EPA	100 ml	125	Aluminium screw outer cap + elastomer inner septum	10	**300802ZA**
Rappaport Vassiliadis broth	-		150 ml	Aluminium screw outer cap + elastomer inner septum	10	**AX021263**
Rappaport Vassiliadis broth	Harm Ph	100 ml	150	Aluminium screw outer cap + elastomer inner septum	10	**AX021383**
Rappaport Vassiliadis broth	Harm Ph	90 ml	125	Aluminium screw outer cap + elastomer inner septum	10	**313552ZA**
Reinforced Clostridium medium	-	100 ml	125	-	10	**300842ZA**
Sabouraud 2% glucose agar	-	200 ml	250 ml	Aluminium	6	**AX022245**
Sabouraud 2% glucose broth	-	100 ml	150 ml	Aluminium	10	**AX021154**
Sabouraud 4% dextrose agar	EP, USP	400 ml	500	Aluminium screw outer cap + elastomer inner septum	10	**550884ZA**
Sabouraud 4% dextrose agar	-	475 ml	500	-	10	**560885ZH**
Sabouraud agar	EU, USP	200 ml	250	Aluminium screw outer cap + elastomer inner septum	10	**400884ZA**
Sabouraud chloramphenicol agar	Harm Ph	200 ml	250	Aluminium screw outer cap + elastomer inner septum	10	**400884CA**
Sabouraud chloramphenicol agar	EP, USP 31	400 ml	500	Aluminium screw outer cap + elastomer inner septum	10	**550884CA**
Sabouraud dextrose agar	Harm Ph	100 ml	125	Aluminium	10	**300884ZA**
Sabouraud dextrose broth	Harm Ph	100 ml	125	Plastic screw inner cap + elastomer septum + protective outer cap + shrink wrapped plastic sleeve	10	**300894ZA**

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Description	Standard	Filling	Size	Cap	Pk	Cat. No.
Selenite cystine broth	ISO 6579, USP	100 ml	125	Aluminium screw outer cap + elastomer inner septum	10	**300954ZA**
Sodium chloride peptone broth, buffered	-	100 ml	300	-	10	**AX021372**
Sodium chloride peptone broth with neutraliser	-	290 ml	400	-	9	**AX021379**
Sodium chloride peptone broth with neutraliser	-	800 ml	1000	-	9	**AX021402**
Sodium chloride peptone broth with Tween 1g/l	-	90 ml	100	-	10	**AX021405**
Sodium chloride peptone broth with Tween 1g/l	USP, FDA, EP	90 ml	100	-	10	**AX021408**
SPS agar	-	200 ml	250	Aluminium screw outer cap + elastomer inner septum	10	**401320ZA**
TAT broth base w/o Tween	-	90 ml	125	Plastic screw inner cap + elastomer septum + protective outer, cap + shrink wrapped plastic sleeve	10	**311114YZ**
TBG broth	EP	100 ml	150 ml	Aluminium screw outer cap + elastomer inner septum	10	**AX021112**
TBX Agar. Vial 100 ml	ISO 16649-1	100 ml	150	Aluminium screw outer cap + elastomer inner septum + shrink wrapped plastic sleeve	10	**301004ZA**
Tetrathionate broth acc. Müller Kaufmann	ISO 6579:2002	100 ml	125	Aluminium screw outer cap + elastomer inner septum	10	**301030ZA**
Thioglycollate broth	USP	450 ml	500	-	10	**561051ZA**
Thioglycollate broth with Tween	-	450 ml	500	-	10	**561042TA**
Thioglycollate Penase broth	Harm Ph	100 ml	125	Plastic screw inner cap + elastomer septum + protective outer cap + shrink wrapped plastic sleeve	10	**301051PF**
TMLB-letheen-Tween® broth	-	90 ml	150 ml	Aluminium	10	**AX021258**
TOS agar	-	450 ml	500	Non injectable cap	10	**534744ZF**
Tributyrin agar	-	100 ml	125	Aluminium screw outer cap + elastomer inner septum	10	**301353ZA**
Tryptone yeast extract agar	ISO 6222:1999	100 ml	125	Non injectable cap	10	**301250ZA**
Tryptone yeast extract agar	ISO 6222:1999	250 ml	500	Non injectable cap	10	**561252ZA**
TSA	Harm Ph	200 ml	250	Aluminium screw outer cap + elastomer inner septum	10	**401114ZA**
TSA	Harm Ph, ISO 9308-1	450 ml	500	Aluminium screw outer cap + elastomer inner septum	10	**531114ZH**
TSA	Harm Ph, ISO 9308-1	400 ml	500	Aluminium screw outer cap + elastomer inner septum	10	**551114ZA**
TSA	-	450 ml	500	-	10	**561114ZA**
TSA LTHTh	-	100 ml	125	-	10	**301121TA**
TSB	USP, FDA, EP	100 ml	250	-	6	**AX021373**
TSB	USP, FDA, EP	50 ml	150	-	10	**AX021374**
TSB	EP, ISO 9301-1, FDA, USP	100 ml	125	Metal cap w/o septum	10	**301121ZQ**
TSB	EP, ISO 9301-1, FDA, USP	90 ml	150	Aluminium screw outer cap + elastomer inner septum	10	**311121ZA**
TSB	EP, ISO 9301-1, FDA, USP	55 ml	125	Plastic screw inner cap + elastomer septum + protective outer cap + shrink wrapped plastic sleeve	10	**371121ZA**
TSB	EP, ISO 9301-1, FDA, USP	200 ml	250	Aluminium screw outer cap + elastomer inner septum	10	**451121ZA**
TSB	-	450 ml	500	-	10	**561121ZA**
TSB Penase	USP, FDA and Eu Ph	100 ml	125	Plastic screw inner cap + elastomer septum + protective outer cap + shrink wrapped plastic sleeve	10	**301121PF**
TSB Tryptic soy broth	Harm Ph, ISO9308-1	100 ml	125 ml	Plastic screw inner cap + elastomer septum + protective outer cap	10	**301121ZA**
TSB with 0,07% lecithine and 0,5% Tween	-	100 ml	125	-	10	**301122SA**
TSB with 0,07% lecithine and 0,5% Tween	-	450 ml	500	-	10	**561122SA**
TSB with 0,1% Tween	-	90 ml	125	-	10	**311122OA**
TSC agar base	UNE 13401 and UNE EN 26461-2	100 ml	125	Aluminium screw outer cap + elastomer inner septum + shrink wrapped plastic sleeve	10	**301141ZA**
VRB agar	Harm Ph ISO 5552	200 ml	250	Aluminium screw outer cap + elastomer inner septum	10	**401183ZA**
VRB agar	-	450 ml	500	-	10	**531183ZA**
VRBD agar	Harm Ph ISO 5552	200 ml	250	Aluminium screw outer cap + elastomer inner septum	10	**401203ZA**
VRBD agar	-	450 ml	500	-	10	**531203ZA**
Yeast extract agar	-	200 ml	250	-	10	**451251ZA**
YGC agar	ISO/DIS 6611	200 ml	250 ml	Aluminium	6	**AX021259**
YGC agar	ISO 7954:1987	450 ml	500	Plastic screw inner cap + elastomer septum + protective outer cap + shrink wrapped plastic sleeve	10	**532230CA**

Culture media, ready to use, in bags

Microbiology media in bags are ideally suited for high sample volumes.

- Space saving packaging
- No risk associated with broken glass bottles
- Media can be easily and conveniently dispensed using a gravimetric diluter or peristaltic pump

Description	Filling	Packed	Standard	Pk	Cat. No.
Buffered peptone water	3 l	3×3 l	-	3	**800179ZB**
Buffered peptone water	5 l	2×5 l	-	2	**850179ZB**
Buffered peptone water	2 l	5x2 l	-	5	**870179ZB**
Fraser broth 1/2	3 l	3×3 l	-	3	**800343VB**
Fraser broth 1/2	5 l	2x5 l	-	2	**850343VB**
Fraser broth 1/2	2 l	5x2 l	-	5	**870343VB**
Maximum recovery diluent	5 l	2×5 l	-	10 l	**AX031119**
Maximum recovery diluent	5 l	2x5 l	-	2	**853120ZB**
Tryptone soya broth (TSB)	3 l	3×3 l	-	3	**801121ZB**
Tryptone soya broth (TSB)	5 l	2x5 l	-	2	**851121ZB**

Description	Pk	Cat. No.
Accessories		
Bag connector	1	**4992630O**

Culture media, MediaBag

Each bag contains a pre-weighed amount of granulated media in a double bagged bag and is irradiated. Just in time enrichment - add sterile water and sample material.

- Space saving, no bottles taking up shelf space
- Long shelf life
- No autoclaving and optimum solubility
- Dust-free work condition

MediaBag, buffered peptone water (BPW) irradiated

Non selective pre-enrichment broth to increase recovery of bacteria, particularly pathogenic Enterobacteriaceae from foodstuffs. The culture medium complies with ISO 6579:2002.

The lab-blender bag contains 5,75 g of BPW to which 225 ml of sterile water and 25 g (or 25 ml) of sample material is added.

More media are available on request.

The following media are approved for the bag system:

Tryptic soy broth
Fraser broth base
Lactose broth
MacConkey broth

The composition is according to standard methods such as ISO, AFNOR, NMKL etc.

Packaging: Special formulations and packaging formats available on request.

Description	Volume	Pk	Cat. No.
Small bag with BPW, irradiated, ready to use			
MediaBag, BPW sachets	225 ml*	100	**7501.00225**
Standbag with BPW, irradiated, ready to use			
MediaBag, standbag with BPW	900 ml*	100	**7301.00900**
MediaBag, standbag with BPW	1125 ml*	100	**7301.01125**
MediaBag, standbag with BPW	2250 ml*	100	**7301.02250**
Aluminium standbag with BPW, irradiated, ready to use			
MediaBag, aluminium standbag with BPW	3375 ml*	50	**7601.03375**
MediaBag, aluminium standbag with BPW	4500 ml*	50	**7601.04500**
Large bag with BPW, irradiated, ready to use			
MediaBag, big bag with BPW	4500 ml*	20	**7201.04500**
MediaBag, big bag with BPW	6750 ml*	20	**7201.06750**
MediaBag standbag, big bag with BPW	9000 ml*	20	**7201.09000**

* Volume of sterile water to be added to each bag.

Culture media, MediaBag system T

The T bag is filled with pre-weighed granulated media. Connect the 0,2 µm filter unit aseptically to the tube by using the the connector device. Add water under aseptic conditions into the bag via the filter sytem. Protect the tube end with the red cap.

Description	Pk	Cat. No.
MediaBag T (tube-bag) for 3 l BPW (buffered peptone water)	25	**7701.03000**
MediaBag T for 10 l BPW (buffered peptone water)	20	**7701.10000**
MediaBag T for 10 l half Fraser	15	**7704.10000**
MediaBag T for 10 l maximum recovery diluent	20	**7702.10000**
MediaBag T for 15 l BPW (buffered peptone water)	15	**7701.15000**
MediaBag T for 20 l BPW (buffered peptone water)	15	**7701.20000**
MediaBag T for 20 l maximum recovery diluent	15	**7702.20000**

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Description	Pk	Cat. No.
MediaBag T for 3 l maximum recovery diluent	25	7702.03000
MediaBag T for 5 l BPW (buffered peptone water)	20	7701.05000
MediaBag T for 5 l maximum recovery diluent	20	7702.05000

Culture media, MediaBag system W

The W bags are folded bags without connectors.

Description	Pk	Cat. No.
MediaBag for 125 ml skimmed milk	100	7503.00225
MediaBag for 125 ml 1/2 Fraser broth	100	7504.00225
MediaBag W for 1125 ml BPW (buffered peptone water)	100	7901.01125
MediaBag W for 1800 ml BPW (buffered peptone water)	50	7901.01800
MediaBag W for 2700 ml BPW (buffered peptone water)	50	7901.02700
MediaBag W for 3600 ml BPW (buffered peptone water)	50	7901.03600

Culture media, ready to use, Compact Dry

Ready to use dehydrated film media in rigid plastic with lid for cultivating and counting microorganisms in food, for monitoring product quality and potential contamination. The plates can be used to test raw material as well as finished products. The microorganisms are identified by the colours, developed by chromogenic substrates and redox indicators.

- Ready to use - place 1 ml sample onto the plate and incubate
- Easy to read - colonies are pigmented with different colours
- Easy to store at room temperature - long shelf life
- Space saving and stackable

Dry TC, EC, CF,YM, XSA, SL, LS are AOAC approved
Dry TC, EC, CF, ETB, XSA, SL, LS are MicroVal approved
Dry TC, EC, CF, ETB, XSA, SL, LS are NordVal approved
European validation and certification alternative methods acc. to EN ISO 16140

Description	Pk	Cat. No.
Compact Dry AQ medium (for heterotrophic bacteria in water)	40	710-2045
Compact Dry CF (Coliform)	40	710-2007
Compact Dry CF (Coliform)	240	710-2008
Compact Dry CF (Coliform)	920	710-2039
Compact Dry EC (*E. coli*, Coliform)	40	710-2004
Compact Dry EC (*E. coli*, Coliform)	240	710-2005
Compact Dry EC (*E. coli*, Coliform)	920	710-2038
Compact Dry ETB (Enterobacteriaceae)	40	710-2029
Compact Dry ETB (Enterobacteriaceae)	240	710-2030
Compact Dry ETB (Enterobacteriaceae)	920	710-2043
Compact Dry ETC (Enterococci)	40	710-2032
Compact Dry ETC (Enterococci)	240	710-2033
Compact Dry ETC (Enterococci)	920	710-2044
Compact Dry LS (Listeria)	40	710-2016
Compact Dry SL (Salmonella)	240	710-2024
Compact Dry SL (Salmonella)	40	710-2023
Compact Dry TC (total counts), AOAC, NORDVAL and MICROVAL approved	40	710-2001
Compact Dry TC (total counts), AOAC, NORDVAL and MICROVAL approved	240	710-2002
Compact Dry TC (total counts), AOAC, NORDVAL and MICROVAL approved	920	710-2037
Compact Dry TTC for tea products	240	710-2036
Compact Dry VP (V.parahaemolyticus)	40	710-2019
Compact Dry VP (V.parahaemolyticus)	240	710-2020
Compact Dry VP (V.parahaemolyticus)	920	710-2042
Compact Dry XBC	40	710-0753
Compact Dry XBC	240	710-0754
Compact Dry XBC	920	710-0755
Compact Dry XSA (S.aureus)	40	710-0707
Compact Dry XSA (S.aureus)	240	710-0708
Compact Dry XSA (S.aureus)	920	710-0709
Compact Dry YM (yeast & mould), AOAC, NORDVAL and MICROVAL approved	40	710-2010
Compact Dry YM (yeast & mould), AOAC, NORDVAL and MICROVAL approved	240	710-2011
Compact Dry YM (yeast & mould), AOAC, NORDVAL and MICROVAL approved	920	710-2040

Ready-to-use media for the beverage industry

These nutrient media can be used for simple, quick and efficient detection of microbiological contamination of all beverage types, allowing microorganisms to be identified long before sub-standard finished goods leave the factory. Virtually all detection media are provided ready-to use. Ideal for all types of samples in the non-alcoholic beverage and brewing industries, for water analyses in breweries and other beverage plants, for weak-spot analysis, for checking aseptic filling lines, to detect Alicyclobacilli (according to Standard IFU Method No. 12), or to assess the risk potential (guaiacol formation) from Alicyclobacilli (according to Standard IFU Method No. 12). Bottles have a content of 250 ml.

- High specificity and speed
- Reliable and ready for use
- Cost-effective and flexible
- Suitability for rapid detection, such as PCR

Description	For	Pk	Cat. No.
AVM aseptic validation medium, basket	checking aseptic filling lines	20 kg	**710-0733**
BAT-agar, 250 ml	detection Alicyclobacilli (according to Standard IFU Method No. 12)	9	**710-0745**
BAT-broth, 250 ml	detection Alicyclobacilli (according to Standard IFU Method No. 12)	9	**710-0744**
DEV-agar, 250 ml	water analyses in breweries and other beverage plants	9	**710-0747**
Guaiacol-detection- kit	assessing the risk potential (guaiacol formation) from Alicyclobacilli(according to Standard IFU Method No. 12)	40 Tests	**710-0751**
LMC-concentrate (Lactose-Peptone-broth), 50 ml	water analyses in breweries and other beverage plants	9	**710-0742**
NBB®-agar (NBB®-A), 250 ml	all types of samples in the brewing industry	9	**710-0740**
NBB®-broth (NBB®-B), 250 ml	all types of samples in the brewing industry	9	**710-0741**
NBB®-broth-enrichment-medium (NBB®-B-AM), 250 ml	all types of samples in the brewing industry	9	**710-0738**
NBB®-B-tubes, 10 ml	all types of samples in the brewing industry	20	**710-0746**
NBB®-concentrate (NBB®-C), 250 ml	all types of samples in the brewing industry	9	**710-0851**
NBB®-powder (NBB®-P)	all types of samples in the brewing industry	300 g	**710-0743**
OFS-agar, 250 ml	all types of samples in the non-alcoholic beverage industry	9	**710-0739**
SSL-broth, 250 ml	all types of samples in the brewing industry	9	**710-0852**
TransFast-broth, 250 ml	all types of samples in the non-alcoholic beverage industry	9	**710-0748**
TransFast-Gel (TF-G), 250 ml	all types of samples in the non-alcoholic beverage industry	9	**710-0853**
TransFast-Gel tubes, 80 ml	all types of samples in the non-alcoholic beverage industry	100	**710-0750**

Swabs for Compact Dry

Sterile swab in a tube. After sampling, the swab is returned to the tube and the sample is extracted into 1 ml of supplied buffer solution which can then be dispensed on to a Compact dry or a Petri dish.

- Compact Dry swabs for sampling in difficult areas and checking dry areas
- Can be stored at room temperature for up to two years

Description	Pk	Cat. No.
Swabs for Compact Dry	25	**710-1479**
Swabs for Listeria Compact Dry	25	**710-2028**
Swabs for surface control with Compact Dry	240	**710-2025**
Swabs for surface control with Compact Dry	40	**710-2026**

Dilution rack for Compact Dry

Sterile cups for easy 10-fold dilution of samples. Filled with 9 ml phosphate buffered sodium chloride solution.

- Cups can be separated into singles
- Easy to open
- Storage at room temperature
- Long shelf life

Description	Pk	Cat. No.
Rack MT-11, 9 ml dilution cup	128	**710-0605**
Rack MT-11 MRD (Maximum Recovery Dilution), 9 ml dilution cup	128	**710-2046**

Description	Pk	Cat. No.
Accessories		
Opener for dilution cups	1	**710-2014**

PALL Life Sciences

Microbiological media in ampoules

A wide variety of sterile ampoule media for common microbiological analyses, in clear glass or plastic ampoules. Supplied pre-measured for maximum efficiency and convenience. For public wastewater and drinking water: MF-Endo and M-FC (with and without rosolic acid for helping to increase the specificity of the medium for faecal coliforms) media are used when analysing water samples for Total Coliforms, Faecal Coliforms and *E. coli.* For food and beverage: M-TGE, HPC, M-Green YM, and Orange Serum broths are used in the food and beverage industry to QC final products (and fluids used in the manufacture of these products) to detect potential spoilage organisms. Trypticase soy broth, M-TGE, and HPC may be used to test final products and process waters for total bacteria in the pharmaceutical and microelectronics industries. Pseudomonas and KF-Streptococcal broths are highly selective media for organisms in these genera, and are used to monitor samples wherever contamination by these organisms must be prevented.

- 2 ml ampoules are a practical, time saving aid for culturing microorganisms on membrane filters
- Ready to use, no dilutions necessary
- Shelf life up to 1 year storing at 2 to 8 °C
- Meet Membrane Filter (MF) Technique Standard Methods requirements with 2 ml ampoules (requirements referenced in Standard Methods for the Examination of Water and Wastewater, 1992 APHA, AWWA, WEF, 20th Edition)

Description	For	Tests	Colour	Pk	Cat. No.
2 ml plastic ampoules					
M-FC broth with rosolic acid	Faecal Coliforms	*E. coli*	Violet	50 Ampoul	**516-9076**
Pseudomonas broth	Pseudomonas sp	Ps. aeruginosa	Light Brown	50 Ampoul	**516-9077**
Trypticase soy broth - USP	Total Count	*E. coli;* S. epidermidis	Light Yellow	50 Ampoul	**516-7964**
HPC media with TTC indicator	Total Count	*E. coli;* S. epidermidis	Light Yellow	50 Ampoul	**516-9081**
MF-Endo broth	Total Coliforms	Total Coliforms	Red	50 Ampoul	**516-7965**
M-TGE broth	Total Count	*E. coli;* S. epidermidis	Light Yellow	50 Ampoul	**516-7966**
M-Green YM broth	Yeast and Moulds	S. cerevisiae	Green	50 Ampoul	**516-7967**
KF-Streptococcal broth	Faecal Streptococcus	S. faecalis	Violet	50 Ampoul	**516-7968**
Orange serum broth	Lactobacillus sp, acid resistant bacteria	L. plantarum; S. cerevisiae	Dark Brown	50 Ampoul	**516-7969**
M-TGE broth with TTC indicator	Total count	*E. coli*	Light Yellow	50 Ampoul	**516-0423**
2 ml wide mouth glass ampoules					
M-FC broth	Faecal Coliforms	*E. coli*	Blue	20 Ampoul	**516-7960**
M-FC broth with rosolic acid	Faecal Coliforms	*E. coli*	Violet	20 Ampoul	**516-7961**
MF-Endo broth	Total Coliforms	*E. coli*	Red	20 Ampoul	**516-7962**

STERILE

Membrane filters with dehydrated media pads for microbiological control

Sartorius

Each set consists of a Ø 50 mm or Ø 47 mm pad, impregnated with nutrient media, packed dry and sterile in a Petri dish, with a membrane filter. After filtration of the sample the membrane is placed in the dish and incubated. More types available on request.

- Simply prepared by the addition of 3.5 ml sterile, demineralised water
- Individually sterile packed
- Can be kept 18-24 months at room temperature, depending on the type

For	Pore size (µm)	Type	Pk	Cat. No.
50 mm				
Enterococci	0,45	Azide	100	**516-7000**
E.coli and coliforms	0,45	Endo	100	**516-7001**
Salmonella	0,45	Bismuth sulphite	100	**391-3957**
Wild yeasts	0,65	Lysine	100	**391-3961**
Acid-tolerant microorganisms	0,45	Orange serum	100	**516-7006**
Colony count	0,45	Caso	100	**516-7007**
Colony count	0,45	Standard	100	**516-7008**
Slime-forming bacteria	0,45	Weman	100	**391-3965**
Thermophilic spore formers	0,45	Glucose- tryptone	100	**391-3966**
E.coli and coliforms	0,45	M-FC	100	**516-7009**
Yeasts and moulds	1,20	Schaufus-Pottinger	100	**516-7012**
Staphylococci	0,45	Chapman	100	**516-7013**
Pseudomonas	0,45	Cetrimide	100	**391-3975**
Leuconostoc oenos	0,45	Tomato juice	100	**391-3979**
E. coli	0,45	ECD	100	**391-3982**

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For	Pore size (µm)	Type	Pk	Cat. No.
47 mm				
Enterococci	0,45	Azide	100	**391-3904**
E.coli, coliforms and Enterobacteriaceae	0,45	Endo high flow	100	**391-3900**
Colony count	0,45	Standard TTC	100	**391-3902**
E.coli, coliforms and Enterobacteriaceae	0,45	Tergitol TTC	100	**391-3905**
Salmonella	0,45	Bismuth sulphite	100	**391-0239**
Yeasts and moulds	0,65	Wort	100	**710-1103**
Lactobacilli and Pediococci	0,45	VLB-S7-S	100	**710-1104**
Wild yeasts	0,65	Lysine	100	**710-1105**
Acid-tolerant microorganisms	0,45	Orange serum	100	**391-3962**
Colony count	0,45	Caso	100	**391-0235**
Colony count	0,45	Standard	100	**710-1106**
Slime-forming bacteria	0,45	Weman	100	**710-1107**
Thermophilic spore formers	0,45	Glucose-tryptone	100	**710-1108**
E.coli and coliforms	0,45	Teepol	100	**710-1109**
E.coli and coliforms	0,45	M-FC	100	**710-1110**
Yeasts and moulds	0,65	Sabouraud	100	**391-0237**
Yeasts and moulds	0,65	Schaufus	100	**710-1111**
Yeasts and moulds	1,20	Schaufus	100	**710-1112**
Staphylococci	0,45	Chapman	100	**391-0240**
Pseudomonas	0,45	Cetrimide	100	**391-3901**
Leuconostoc oenos	0,45	Tomato juice	100	**710-1114**
Yeasts and moulds	0,45	Schaufus-Pottinger	100	**710-1115**
E.coli	0,45	ECD	100	**391-3906**
Colony count	0,45	R2A	100	**391-0236**
Yeasts and moulds	0,45	Malt extract	100	**710-1116**
E.coli and coliforms	0,45	Chromocult	100	**710-1117**
Yeasts and moulds	0,45	Yeast extract	100	**391-3907**
E.coli, coliforms and Enterobacteriaceae	0,45	MacConkey	100	**710-0844**

Lateral Flow test for Campylobacter, Singlepath® Direct Campy Poultry Kit

No pathogen causes human disease as often as Campylobacter. It can spread to an entire poultry flock in a few days, making it a gamble to rely on the results of earlier screening tests. Thanks to Singlepath® Direct Campy Poultry Kit it is possible to screen shortly before slaughter because it gives the results in less than two hours. Separating Campylobacter high (>10^7 CFU per g faecal material) and low risk flocks for slaughter is a financially important decision.

- Easy - the kit contains everything you need for testing
- Fast - from sample collection to test result in less than 2 hours
- On-site testing - convenient do-it-yourself test for use anywhere – even on the farm

Packaging: The kit contains: 10 x Singlepath® test devices, 10 x dilution tubes 20 ml, 10 x sample tubes 1.5 ml, 10 x transfer pipettes 3 m, 1 x 1 ml sample buffer, 1 x 100 ml sample diluent

Description	Pk	Cat. No.
Singlepath® Direct Campy Poultry Kit	10 Tests	**1.04155.0001**

Lateral Flow test for Bacillus cereus, Singlepath® Emetic Tox Mrk and Duopath® Cereus Enterotoxins

Bacillus cereus is an environmentally widespread Gram-positive, spore-forming, motile rod, which can cause gastrointestinal (e.g. diarrhea) as well as non-gastrointestinal diseases (e.g. septicemia, endocarditis, infections of the central nervous system) in humans. The illness is normally self-limiting and of short duration, although a few fatal cases have occurred. Reporting of Bacillus cereus food poisoning is not required, and thus the relatively low number of registered cases is regarded as representing only about 1% of the actual cases. The frequency of cases also varies geographically, accounting for less than 1% of all food-related illnesses in some countries while more than 30% in others. In addition to this, some Bacillus cereus strains produce a different, heat stable toxin known as Bacillus cereus emetic toxin. This toxin is assumed to be pre-formed in the food and is often associated with starchy products, such as rice and pasta. For these reasons, it is becoming increasingly relevant to test foods for toxin-forming Bacillus cereus using reliable and rapid testing methods. Innovative, rapid tests make screening for pathogenic organisms easier. The one-step format reduces the possibility of errors during handling.

- Easy to use- simply add sample and read off the result
- Safe- clear and distinctive positive or negative test results with built-in positive control
- Reliable- as sensitive as the official culture media method
- Economical- rapid results save labour and inventory costs

Description	Pk	Cat. No.
CGYE (Caseinhydrolysate-glucose-yeast extract) broth	100 g	**1.01868.0100**
D(+)-Glucose monohydrate	1 kg	**1.08342.1000**
Duopath® Cereus Enterotoxins	25 Tests	**1.04146.0001**
Singlepath® Emetic Tox Mrk	25 Tests	**1.04154.0001**

Lateral Flow test for Campylobacter, Singlepath® Campylobacter

Campylobacteriosis is an infection caused by Campylobacter, most commonly C. jejuni. It produces an inflammatory, sometimes bloody, diarrhea or dysentery, including cramps, fever and abdominal pain. The debilitating neurological disorder, Guillain-Barre Syndrome (GBS), as well as reactive arthritis have also been associated with recent infections with certain C. jejuni strains. C. lari and the emerging pathogen, C. upsaliensis, have also been reported in a small percentage of cases of human Campylobacter infection. Campylobacter spp. are highly infectious - as few as 500 bacteria can cause illness. There is an increasing demand for Campylobacter testing in food to meet regulations regarding Campylobacter levels in poultry. The majority of Campylobacter spp. are relatively metabolically inactive, making identification based on biochemical characteristics difficult. Currently, the most commonly used techniques to test food products for Campylobacter are traditional methods based on culture media. Innovative, rapid tests make screening for pathogenic organisms easier. The one-step format reduces the possibility of errors during handling.

- Easy to use; simply add sample and read off the result
- Safe; clear and distinctive positive or negative test results with built-in positive control
- Reliable; as sensitive as the official culture media method
- Economical; rapid results save labour and inventory costs
- According AOAC-RI

Description	Pk	Cat. No.
Bolton selective broth (base)	500 g	**1.00068.0500**
Bolton broth selective supplement	10 Vial	**1.00079.0010**
Singlepath® Campylobacter	25 Tests	**1.04143.0001**

Lateral Flow test for E. coli, Singlepath® E. coli O157 and Duopath® Verotoxins

EHEC is capable of inducing life threatening illnesses, particularly in people with immune deficiency, young children and the elderly. Although the most common cause of EHEC is E. coli O157, other serotypes, such as O26, O45, O103, O111, O121, and O145, are also relatively frequent causes of infection. Typical symptoms are severe abdominal pain and diarrhea, which is initially watery but often becomes bloody. E. coli are Gram-negative, non-sporulating, facultative anaerobic bacilli. Amongst the pathogenic E. coli, Verotoxin-forming strains (STEC or VTEC) have gained importance in recent years. The group of enterohaemorrhagic E. coli (EHEC) with its highly pathogenic serovar O157:H7 strain is particularly interesting in this respect. The main sources of infection are contaminated, raw or insufficiently heated foods of animal origin, such as meat and dairy products. The reservoir for EHEC is the gut of ruminants. The microorganisms can enter food during the processing of meat and dairy products if hygienic conditions are inadequate. The drastic increase in the incidence of food contamination caused by E. coli O157 demands reliable and rapid methods of detection. Innovative, rapid tests make screening for pathogenic organisms easier. Complete test sets for the detection of pathogens and toxins. The one-step format reduces the possibility of errors during handling. In addition to tests for the most common cause of infection, E. coli O157, there exits a 24-hour screening protocol for VTEC, including E. coli O104:H4, based on Rapidcult™ E. coli enrichment combined with detection using Duopath® Verotoxins.

- Easy to use; simply add sample and read off the result
- Safe; clear and distinctive positive or negative test results with built-in positive control
- Reliable; as sensitive as the official culture media method
- Economical; rapid results save labour and inventory costs
- According AOAC-RI

Description	Pk	Cat. No.
CAYE broth supplement	10 Vial	**1.00051.0010**
CAYE broth	100 g	**1.00060.0100**
mTSB Broth with novobiocin	500 g	**1.09205.0500**
m EC broth with novobiocin	500 g	**1.14582.0500**
Singlepath® E. coli 0157	25 Tests	**1.04141.0001**
Duopath® Verotoxin	25 Tests	**1.04144.0001**

Lateral Flow test for Legionella, Duopath® Legionella

The Legionella species can cause two types of Legionellosis: Legionnaires' disease and Pontiac fever. Legionnaires' disease, also called "Legion Fever", is a severe pneumonia. Pontiac fever is a milder respiratory illness that resembles acute influenza. Legionellosis is not contagious. Common reservoirs of the bacteria include cooling towers, air conditioning units, swimming pools, domestic hot-water systems and fountains. The primary route of transmission is via aerosols. Legionella are pathogenic Gram-negative bacteriae, ubiquitously distributed in both natural and artificial water environments. They are acid tolerant (pH 2.8–pH 8.3) as well as thermo tolerant (<20°C–66°C), and thus they can adapt to and survive in diverse aquatic settings. Legionellae are known to form biofilms in aquatic environments as a survival mechanism against adverse conditions. From a human health perspective, the Legionella species, particularly L. pneumophila, is important since it is the causative agent of Legionellosis or Legionnaires' disease in humans. As per the Center for Disease Control (CDC), in the United States, the disease affects between 8,000 to 18,000 individuals annually with a fatality rate ranging from 5–30%.Innovative, rapid tests make screening for pathogenic organisms easier. The one-step format reduces the possibility of errors during handling.

- Easy to use; simply add sample and read off the result
- Safe; clear and distinctive positive or negative test results with built-in positive control
- Reliable; as sensitive as the official culture media method
- Economical; rapid results save labour and inventory costs

Description	Pk	Cat. No.
Duopath® Legionella	25 Tests	**1.04147.0001**

Lateral Flow test for Listeria, Singlepath® Listeria and Duopath® L. mono

Listeria monocytogenes is one of the most widely distributed foodborne pathogens in the world and is responsible for severe infections in immunocompromised persons, pregnant women and neonates. As a result, the mortality rate in infected individuals is high despite the relatively low number of cases around the world. Listeria infections (listeriosis) can result in anything from mild gastroenteritis to severe cases of sepsis, meningitis, encephalitis or abortion. Due to the ubiquitous distribution of Listeria and their capability to grow at refrigeration temperatures (2–8°C), food products constitute one of the main sources of infection. Listeria is a genus of Gram-positive, non-sporeforming, rod-shaped bacteria. Of the six known species of the genus Listeria, Listeria monocytogenes deserves particular mention as a human and animal pathogen; L. ivanovii is only pathogenic in animals, while L. innocua, L. seeligeri, L. grayi, and L. welshimeri are considered harmless environmental bacteria. Consequently, food legislation in many countries specifies strict limits for Listeria spp. or Listeria monocytogenes. In the conduct of risk-related quality controls in food, tests should be run for L. monocytogenes, and for the Listeria Genus in general. The presence of Listeria – in particular of L. innocua – is an indicator for critical hygienic conditions in the production process. Innovative, rapid tests make screening for pathogenic organisms easier. The one-step format reduces the possibility of errors during handling.

- Easy to use; simply add sample and read off the result
- Safe; clear and distinctive positive or negative test results with built-in positive control
- Reliable; as sensitive as the official culture media method
- Economical; rapid results save labour and inventory costs

Description	Pk	Cat. No.
Fraser Listeria ammonium iron(III) supplement	10 Vial	**1.00092.0010**
Fraser Listeria supplement	10 Vial	**1.00093.0010**
Listeria selective enrichment broth acc. to Fraser (base)	500 g	**1.10398.0500**
Singlepath® Listeria	25 Tests	**1.04142.0001**
Singlepath® L. mono	25 Tests	**1.04148.0001**

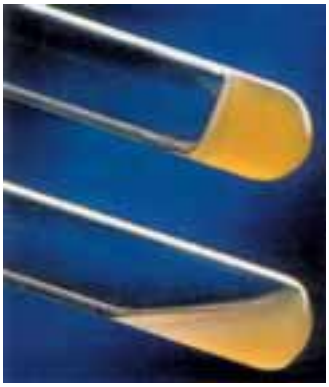
Lateral Flow test for Salmonella, Singlepath® Salmonella

Most individuals infected with Salmonella develop diarrhea, fever, and abdominal cramps 12–72 hours after infection. The illness usually lasts 4–7 days, and the majority of patients recover without treatment. However, in some cases, the diarrhea may be so severe that hospi ta lization is required. Salmonella is a genus of rod-shaped, Gram-negative, non-sporeforming, predominantly motile bacteria, belonging to the Enterobacteriaceae family. Salmonella spp. are one of the most common causes of food poisoning worldwide and have been isolated from most types of raw food (e.g. meats, eggs and plant products). Their high resistance to drying combined with a very high heat resistance once dried makes Salmonella a potential problem in most foods, particularly in dry and semidry products. Food legislation in many countries includes limits on Salmonella – typically absence in 25 g of food. Traditional microbiological methods for detection of Salmonella in food and animal feed require a total of up to 5 days to obtain a simple yes/no result. Innovative, rapid tests make screening for pathogenic organisms easier. The one-step format reduces the possibility of errors during handling.

- Easy to use; simply add sample and read off the result
- Safe; clear and distinctive positive or negative test results with built-in positive control
- Reliable; as sensitive as the official culture media method
- Economical; rapid results save labour and inventory costs
- According AOAC-RI

Description	Pk	Cat. No.
Singlepath® Salmonella	25 Tests	**1.04140.0001**
Peptone water (buffered)	500 g	**1.07228.0500**
Salmonella enrichment broth acc. to Rappaport and Vassiliadis (RVS broth)*[1]	500 g	**1.07700.0500**

Microbiology detection tests, Bactident®



The presence or absence of enzyme activity is a taxonomic property of microorganisms and can be used for their differentiation or identification.

Description	Pk	Cat. No.
Bactident® Aminopeptidase	50 Tests	**1.13301.0001**
Bactident® Catalase	30 ml	**1.11351.0001**
Bactident® Coagulase	6	**1.13306.0001**
Bactident® E.Coli	50 Tests	**1.13303.0001**
Bactident® Oxidase*	50 Tests	**1.13300.0001**

* IVD

Real-Time PCR detection kits for microorganisms, QuickBlue RealQuick

The RealQuick product range is optimised for Real-Time PCR and uses Taqman® probe technology for the detection of human pathogenic bacteria. The kits are typically co-ordinated in such a way as to enable them to be used together in one run.

- Compatible with all major Real-Ttime PCR instruments
- Excellent results with regard to specificity and sensitivity
- Compliant with ISO standard 20838:2006

Description	Pk	Cat. No.
QuickBlue RealQuick C. jejuni PCR Kit	1.000 Tests	**710-0677**
QuickBlue RealQuick C. jejuni PCR Kit	250 Tests	**710-0679**
QuickBlue RealQuick C. jejuni PCR Kit	50 Tests	**710-0680**
QuickBlue RealQuick C. perfringens PCR Kit	1.000 Tests	**710-0681**
QuickBlue RealQuick C. perfringens PCR Kit	250 Tests	**710-0683**
QuickBlue RealQuick C. perfringens PCR Kit	50 Tests	**710-0684**
QuickBlue RealQuick E. coli PCR Kit	1.000 Tests	**710-0673**
QuickBlue RealQuick E. coli PCR Kit	250 Tests	**710-0675**
QuickBlue RealQuick E. coli PCR Kit	50 Tests	**710-0676**
QuickBlue RealQuick E. sakazakii PCR Kit	1.000 Tests	**710-0669**
QuickBlue RealQuick E. sakazakii PCR Kit	250 Tests	**710-0671**
QuickBlue RealQuick E. sakazakii PCR Kit	50 Tests	**710-0672**
QuickBlue RealQuick L. innocua PCR Kit	1.000 Tests	**710-0661**
QuickBlue RealQuick L. innocua PCR Kit	250 Tests	**710-0663**
QuickBlue RealQuick L. innocua PCR Kit	50 Tests	**710-0664**
QuickBlue RealQuick L. monocytogenes PCR kit	1000 Tests	**710-3323**
QuickBlue RealQuick L. monocytogenes PCR kit	250 Tests	**710-3324**

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Description	Pk	Cat. No.
QuickBlue RealQuick L. monocytogenes PCR kit	50 Tests	**710-3325**
QuickBlue RealQuick L. pneumophila PCR Kit	1.000 Tests	**710-3328**
QuickBlue RealQuick L. pneumophila PCR Kit	250 Tests	**710-3327**
QuickBlue RealQuick L. pneumophila PCR Kit	50 Tests	**710-3326**
QuickBlue RealQuick S. aureus PCR Kit	1.000 Tests	**710-0665**
QuickBlue RealQuick S. aureus PCR Kit	250 Tests	**710-0667**
QuickBlue RealQuick S. aureus PCR Kit	50 Tests	**710-0668**
QuickBlue RealQuick salmonella PCR kit	1000 Tests	**710-3320**
QuickBlue RealQuick salmonella PCR kit	250 Tests	**710-3321**
QuickBlue RealQuick salmonella PCR kit	50 Tests	**710-3322**
QuickBlue RealQuick V. alginolyt. PCR Kit	1.000 Tests	**710-0693**
QuickBlue RealQuick V. alginolyt. PCR Kit	250 Tests	**710-0695**
QuickBlue RealQuick V. alginolyt. PCR Kit	50 Tests	**710-0696**
QuickBlue RealQuick V. parahaem. PCR Kit	1.000 Tests	**710-0689**
QuickBlue RealQuick V. parahaem. PCR Kit	250 Tests	**710-0691**
QuickBlue RealQuick V. parahaem. PCR Kit	50 Tests	**710-0692**
QuickBlue RealQuick V. Sus scrofa PCR Kit	1.000 Tests	**710-0697**
QuickBlue RealQuick V. Sus scrofa PCR Kit	250 Tests	**710-0699**
QuickBlue RealQuick V. Sus scrofa PCR Kit	50 Tests	**710-0704**
QuickBlue RealQuick V. vulnificus PCR Kit	1.000 Tests	**710-0685**
QuickBlue RealQuick V. vulnificus PCR Kit	250 Tests	**710-0687**
QuickBlue RealQuick V. vulnificus PCR Kit	50 Tests	**710-0688**

UV lamp

UV lamp designed for use with Fluorocult® culture media.

Output (W)	Wavelength (nm)	Pk	Cat. No.
4	366	1	**1.13203.0001**

Spore suspension, Geobacillus stearothermophilus

For the antibiotic sulphonamide residue test according to Kundrat. The *Geobacillus stearothermophilus* spore suspension is used in conjunction with the test agar for performing the antibiotic sulphonamide residue test according to Kundrat, Cat. No. 1.10662. The test detects antimicrobial residues such as antibiotics, sulphonamides and other chemotherapeutics in meat and other foodstuffs of animal origin. It is a routine qualitative procedure. The test is based on agar diffusion, using spores of *Geobacillus stearothermophilus* as test organisms. Antibiotic and sulphonamide residues inhibit the growth of the test organism. Cleaning agents, disinfectants and preservatives do not influence the test.

- This inhibition of growth is indicated by the formation of inhibition zones
- These zones remain purple in colour whilst the rest of the nutrient medium turns yellow

Description	Pk	Cat. No.
Geobacillus stearothermophilus spore suspension	5 Ampoul	**1.11499.0001**

Bioindicator, Sterikon® plus

Sterikon® plus bioindicators can be used to test the functionality of autoclaves (15 minutes at 121 °C). They can also be used to check any sort of autoclave load for the success of sterilisation. For example, pharmaceuticals, particularly products in ampoules, canned food etc.

- Easy interpretation due to colour change
- Safe, because spores of non-pathogenic organisms (*Geobacillus stearothermophilus*) are used

Acc. to the recommendation of USP and EP for the use of bioindicators for checking the autoclaving of pharmaceutical products.

Description	Pk	Cat. No.
Sterikon® plus bioindicator	15 Ampoul	**1.10274.0001**
Sterikon® plus bioindicator	100 Ampoul	**1.10274.0002**

Spore suspension, Bacillus subtilis (BGA)

Bacillus subtilis (BGA) spore suspension is used with the culture media test agar pH 6.0 for the inhibitor test Cat. No. 1.10663.0500 and test agar pH 8.0 for the inhibitor test Cat. No. 1.10664.0500 for the detection of antimicrobial inhibitors in meat by routine methods. The test is conducted as an agar diffusion test. The spores of *bacillus subtilis* (BGA) are used as the test organisms.

- Inhibitors inhibit the growth of the test bacteria
- The inhibition of growth is indicated by inhibition zones

Description	Pk	Cat. No.
Bacillus subtilis (BGA) spore suspension	15 Ampoul	**1.10649.0001**

IVD

Anaerobic incubation system, Anaerocult®

Anaerocult® system is a reliable and established system for the cultivation of obligate and facultative anaerobes. The Anaerocult® system is based on sachets made of highly absorptive and highly gas permeable paper. The sachets, of different sizes, are filled with an oxygen-binding reagent mixture which also produces carbon dioxide. Water is added to start the reaction, which consists of the oxidation of finely divided iron and release of CO_2. The reaction proceeds without a catalyst. Incubation is possible in an anaerobic jar or in bags.

- All Anaerocult® products are catalyst-free for a safe environment, and they don't create high temperatures which can negatively impact the growth of microorganisms
- For the cultivation of anaerobic and microaerophilic/capneic microorganisms
- Anaerocult® is used to create an anaerobic environment for up to 12 Petri dishes in an anaerobic jar or as sets including special incubation bags for one to four Petri dishes

Description	Pk	Cat. No.
For cultivation in an anaerobic jar		
Anaerobic jar 2,5 l for 12 standard Petri dishes	1	**1.16387.0001**
Plate basket for 12 Petri dishes	1	**1.07040.0001**
Anaerocult® A for the incubation of up to 12 Petri dishes in an anaerobic jar	10	**1.13829.0001**
Anaerocult® C for the specific incubation of microaerophilic/capneic microorganisms in an anaerobic jar	25	**1.16275.0001**
Lid for anaerobic jar (spare)	1	**9.57008.0000**
For cultivation of Petri dishes		
Anaerocult® A mini for the incubation of four Petri dishes in an anaerobic atmosphere	25	**1.01611.0001**
Anaerocult® C mini for the incubation of one or two Petri dishes in a microaerophilic/capneic atmosphere	25	**1.13682.0001**
Anaerocult® P for the anaerobic incubation of single Petri dishes in a bag	25	**1.13807.0001**
Anaerocult® IS for the anaerobic incubation of identification systems and sensitivity tests	25	**1.16819.0001**
Bag sealing clip	25	**1.14226.0001**
Indicator strips to test for an anaerobic environment	50	**1.15112.0001**

Preservation system, Cryoinstant

Microbiological laboratories need a simple procedure to maintain important microorganisms rather than repetitive sub-culturing, which results in contaminated cultures, loss of viability and, even more importantly, loss of original characteristics by introducing biochemical and genetic changes. Cryoinstant consists of 25 porous beads in a vial filled with a broth containing glycerol. Microorganisms will bind to the porous surface of the beads. The excess broth is aspirated, then store the vials at temperatures down to –70 °C in a freezer.

- Quick and easy to use
- Colour-coded
- Storage down to –70 °C
- Quality controlled for fertility and sterility

Packaging: Cryoinstant is packed in packs of 50 vials of 2 ml.

Description	Pk	Cat. No.
Cryoinstant, blue	50	**822072ZA**
Cryoinstant, green	50	**822073ZA**
Cryoinstant, mixed	50	**822070ZA**
Cryoinstant, natural	50	**822075ZA**
Cryoinstant, red	50	**822071ZA**
Cryoinstant, yellow	50	**822074ZA**

Antibiotic assay discs

For determining the type of causal agent of infectious diseases and for checking their sensitivity to antibiotics and chemotherapeutic agents *in vitro* by means of the inhibition zone determination method. The antibiogram allows rational and selective chemotherapy. The test disks are coated with chemotherapeutic agents, placed on the inoculated nutrient agar and incubated. The size of the inhibition zone is a measure for the effectiveness of the substances.

- Uniform thick soft discs, for the absorption of test solutions in antibiotic assays
- 440 g/m² and 920 µm

Description	Pk	Cat. No.
Antibiotic assay discs, Ø 6 mm	1000	**710-0606**
Antibiotic assay discs, Ø 13 mm	1.000	**710-0636**

Latex agglutination tests

Highly specific rapid, quality latex agglutination kits are available for the confirmation of many of the key pathogens encountered in clinical laboratories, food, environmental and water testing laboratories.

- Results in two minutes
- Increased efficiency
- High sensitivity and specificity
- Accurate and reliable results

Description	Pk	Cat. No.
Campylobacter	50	**710-1582**
Clostridium difficile	50 Tests	**710-1585**
E. coli O157	50	**710-1587**
Legionella pneumophila	50	**710-1581**
Listeria	50	**710-1583**
Salmonella	50	**710-1580**
Staphylococcus aureus	100	**710-1586**
Strep A,B,C,D,F and G	50	**710-1588**

Microgen® Listeria ID

Developed specially for the food industry and conforming to the requirements of all international food standards, this identification contains a unique micro-haemolysin test providing a fully self-contained identification system. For the identification of all Listeria spp. (6 species). The above organisms can be identified from selective agar or non-selective agar.

- AFNOR validated
- No sub-culture necessary from selective media
- AOAC-RI validated
- CMMAS assessed and approved

Description	Pk	Cat. No.
Listeria ID Kit	20 Tests	**710-1584**

Microgen® GN A+B ID

The Microgen® GNA-ID System is for the identification of the commonly encountered Enterobacteriaceae from food or medical samples including urinary samples and common wound isolates. For wider clinical applications and for veterinary and industrial samples, all currently recognised species of Enterobacteriaceae and an extensive range of oxidase-positive Gram Negative Bacilli can be identified using the combination of Microgen® GN A + GN B identification systems.

- Convenient 12 substrate identification system for the commonly encountered Enterobacteriaceae
- Results in 48 hours
- Simple and easy to use

Description	Pk	Cat. No.
GN-ID A	60 Tests	**710-1590**
GN-ID B	24 Tests	**710-1589**

VWR COLLECTION

Delivering high quality and superior performance

Please contact your local VWR sales office or go to vwr.com for the latest news and special offers

Colony counter, SC6 plus

Ideal for all microbiology applications, the SC6 plus colony counter provides fast and accurate counting of bacterial and mould colonies. The SC6 plus colony counter is easy to use. Simply place the Petri dish on the electronic pressure pad and touch the dish with a felt tip pen to mark each colony. The touch pressure causes a count to be registered on the digital display and an audible tone confirms each count made (the sound can be switched on or off as desired). Any suitable implement – a felt tip pen for example – may be used to apply pressure to the dish. The sensitivity required to register a count can be adjusted to suit any user. Ability to connect to printer or computer via USB using the included cable.

- Pressure sensitive counting and average count facility
- Digital readout from 0 to 999
- Bright white energy saving LED lighting
- With BioCote® antimicrobial protection and audible confirmation
- Choice of light or dark background

Delivery information: Supplied with two Wolffhügel graticules and dish centering adapters to facilitate use with 50 - 90 mm dishes and USB cable.

Model	SC6 plus
Count	0 - 999
Digital display	3 digit LED
Dish size (mm)	50 - 90
Weight (kg)	1,5
W×D×H (mm)	310×300×140

Description	Pk	Cat. No.
Colony counter, SC6 plus	1	**710-0937**

Description	Pk	Cat. No.
Accessories		
Magnifier 3.0x	1	**710-0353**
Magnifier 1.7x	1	**710-2201**

Colony counter, Star-Count STC 1000

The Star-Count STC 1000 colony counter is designed for rapid and accurate counting of bacterial colonies using the latest technologies. Adapters for 50, 60, 80 and 90 mm dishes are available (90 mm adapter included, others are optional). LED lighting and contrast can be adjusted. There is a choice between single mode (count on one Petri dish) and multiple mode (count up to 20 dishes and the average continuously calculated and displayed). The instrument has a pressure-sensitive dish holder so it can be used with any kind of marker pen or probe. An optional external counting marker can also be connected. With the communication package, the count values can be stored with date and time. Additionally there is the possibility to add sample IDs or barcodes (reader is an option) to the count value.

- Multifunction graphic display shows the number of colonies (up to 999), average, time and date
- Values can be saved on a memory card (optional)
- Audible and visible confirmation of each count
- LED backlight and sidelight illumination
- RS232 for connection to a printer/USB for a connection to a computer

Model	STC 1000
Dish size (mm)	50, 60, 80, 90
Max scale diameter (mm)	120
Standard magnifier	100 mm (2x)
W×D×H (mm)	260×330×110

Description	Pk	Cat. No.
Colony counter STC 1000, supplied with magnifying glass, standard marker, Wolffhügel grid, adapter for 90 mm Petri dishes, cable with universal plug	1	**710-0710**

Description	Pk	Cat. No.
Accessories		
Adapter set for Petri dishes Ø 50/60/80/90 mm	1	**710-0725**
External marker with waterproof pen and cable	1	**710-0717**
Fuse	1	**710-0720**
Plate, glass	1	**710-0719**
Printer	1	**710-0711**
Printer cable	1	**710-0712**
Waterproof pen	1	**710-0716**
Wolffhügel grid	1	**710-0718**

Colony counter, eCount™

The all in one eCount™ combines a multifunction electronic counter with a Sharpie® pen for marking Petri dishes to prevent missing or double counting colonies. Light, ergonomic body is balanced for easy manipulation. Ideal for rapid, accurate counts. Press the lock key to write with the Sharpie® pen without counting. The Sharpie® pen provides highly visible marks on both plastic and glass dishes. Counter accepts both fine and extra fine point Sharpie® pens. Easily change colours for separate counts. With 3 V CR 1220 lithium battery.

- Five digit display
- Touch controls for multiple counts, count up to 32 different zones
- Counter automatically beeps with each count, or select the LED flash mode for a visual alert of each count
- Working temperature: 0 to + 50 °C

Delivery information: Includes one fine-point Sharpie® pen and weighted stand.

Description	Pk	Cat. No.
eCount™	1	**710-0596**
Replacement pen for eCount™	12	**710-0918**

Colony count pen

Pen style electronic colony counter for rapid and accurate counts. Low energy consumption: Up to 1 000 000 counts before changing the battery. This electronic pen counter is ideal to ensure precise counts. The lightweight and ergonomic shape make heavy workload operation easy. The colony counting pen can be reset at any time by pressing the white button or turning off the pen. Once the counting is complete, the pen can be used to record the counts. A low cost way to prevent missing or double counting colonies.

- 4-figure digital display
- Audible alarm for end of count
- Reset button
- Light and ergonomic

Description	Pk	Cat. No.
Colony count pen	1	**710-0884**
Refill for electronic colony counter pen	5	**710-0902**

Colony counter, aCOLyte 3

aCOLyte 3 can be used for total viable counts in many environmental, food monitoring, pharmaceutical, clinical, and molecular biology applications. The aCOLyte 3 is available in one configuration and features new simple-to-use software that greatly improves efficiency, reliability and productivity over previous models. The software uses a powerful new algorithm for colony counting on pour and spiral plates, which until now were only found on the advanced ProtoCOL 3 models. Plates are automatically counted with results directly transferred to Excel or OpenOffice. The new style aCOLyte 3, recognisable by its black and silver colour, accepts plates up to 90 mm diameter. Lighting is provided by LEDs mounted above and below the sample area for both transmitted and epi-illumination. A detachable screen can be used to eliminate strong ambient light if required. aCOLyte 3 can be used with any conforming laptop or desktop PC and connects simply by using a USB port.

- Automated and quick - typically plates can be counted accurately in under 1 second
- Image display with zoom function
- Improved counting algorithm
- Optional screens to blockout ambient light
- Direct export to Excel and data is saved to a SQL database
- Audit trail

Model	aCOLyte 3
Dish size (mm)	90 and Petrifilm
Illumination	Long-life upper and lower LED arrays with darkfield and brightfield
Power supply	110/240 V
Weight (kg)	3,2
W×D×H (mm)	250×270×250

Description	Pk	Cat. No.
aCOLyte 3 colony counter	1	**710-0992**

Colony counter, ColonyDoc-It™ imaging station

UVP

The innovative, compact design of the ColonyDoc-It™ enables automated, fast and accurate colony counting. The high resolution DSLR colour camera is specifically designed to capture white light and fluorescent marked colonies and a wide array of samples. The sophisticated yet intuitive system offers researchers easy detection and analysis of media. When colony samples require different light sources, the ColonyDoc-It™ enables the easy selection of bright LED lighting. The epi blue light and optional GFP filter enable users to visualise GFP fluorescence detection. The high resolution capabilities allow capture of images down to 0,8 mm. There is no need to adjust camera buttons, since the camera is easily controlled by the software. Connection to a PC/monitor (meeting a minimum specification) is required for full function.

- A wide range of lighting options are included
- Define parameters including eight colour differentiation, split or merge, filter by group or size
- High resolution 15.1 megapixel DSLR colour camera

ColonyDoc-It™ software:

The software loads onto a computer for camera control, image capture and analysis. In addition to the software's image capture controls, the ColonyDoc-It™ software provides automatic, semi-automatic and manual colony counting capabilities. Users can define specific counting parameters including colour differentiation, splitting or merging colonies and identifying filters by group or size. Users can create templates for specific camera settings and analysis functions, allowing the same settings to be selected each time an experiment is run. In addition to colony counting, the easy to use software offers many image enhancement and reporting tools and supports compliance. Images can be saved in multiple file formats, plus data can be exported to Excel or other programs.

Description	Pk	Cat. No.
ColonyDoc-It™ 105 imaging station	1	**710-0732**

VWR COLLECTION

2 year warranty

SELECTED FOR YOU

Coliform bath with MX temperature controller

Stainless steel bath with user friendly MX temperature controller with three control buttons and on-screen prompts. Specifically designed for a range of faecal coliform and *E.coli* determinations as specified in 19th edition of Standard Test Methods for the Examination of Water and Wastewater. The controller bridge made from chemical resistant DuraTop™ is easily removed to allow cleaning of the tank. The bath has an opening with lid for optional cooling coil which is ideal for set points near ambient temperature.

- Large EasyView™ LCD display with alarm or fault icons and English prompts and menus
- User-adjustable high and low temperature limits and low liquid level alarms
- Single speed pressure pump
- Integral pump and heater coil protection
- Single point calibration

Complies with DIN 12876-1, Safety class I

Maximum pump capacities:
10,6 l/min, 100 mbar

Delivery information: Supplied with hinged, see-through bath cover.

Type	Temp. range (°C)	Temp. stability	Heating capacity (kW)	Capacity (l)	Bath W×D×H (mm)	W×D×H (mm)	Pk	Cat. No.
MX28C135	RT* +10... 135	±0,07	1,1	28	328×300×210	546×353×457	1	**462-0214**

Description	For	Pk	Cat. No.
Accessories			
Cooling coil	use with VWR baths, 462-0207, 462-0208, 462-0212, 462-0213 and 462-0214	1	**462-0279**

* RT = Ambient

Media preparators, Steragar

The Steragar preparators are designed for preparing, sterilising and dispensing media under controlled conditions of time and temperature. The automation and control that is achieved by the instruments allows the user to reproducibly prepare media as suggested by international standards. The external and internal chamber are made of AISI 304 stainless steel. The insulated ABS lid is equipped with screw cap opening for adding heat-sensitive substances, steam safety valve, chamber pressure manometer, agar dispensing connector and thermoprobe. The automatic chocolate-agar cycle is standardised. A programmable microprocessor card guarantees a good management of the sterilisation and dispensing process.

- Water jacket system for a rapid and linear cooling
- Electromagnetic agitation system gives maximum temperature uniformity
- Control panel with digital display for a continuous monitoring of the temperature and the production cycle
- Closure with "Quick Tilt" system for easier opening
- Accurate temperature control allows the addition of thermolabile products, such as blood, at the lowest possible temperature (e.g. 42 °C) without agar solidification
- Mains water supply connection

Delivery information: Steragar media preparators are supplied with printer, internal basket and "Aspir" nozzle for culture media aspiration.

Model	Steragar up to 10 l	Steragar up to 16 l
Weight (kg)	55	60
W×D×H (mm)	600×500×610	

Description	Pk	Cat. No.
Steragar up to 10 l	1	**710-0864**
Steragar up to 16 l	1	**710-0863**

Description	Pk	Cat. No.
Accessories		
Aspir aspiration nozzle	1	**710-0899**

Automatic agar preparator and dispenser, Agarster Eco Mini

This bench top, convenient media preparator for GLP compliance is used for preparing, sterilising and holding up to 3 litres of agar at dispensing temperature. GLP requirements recommend fresh culture for better selectivity, growth and morphological characteristics of colonies. This automatic media preparator is easy to use and to maintain, and facilitates the planning of media production throughout the day/week. The need for glassware and hot vessel/container transfer is eliminated. With microprocessor controlled programmable process cycles and heat generated by a reinforced element, each lot can be monitored for quality control. The system includes an airtight lid equipped with steam safety valve, inner chamber pressure gauge, agar dispensing connector, thermocouple, screw cap opening for adding heat-sensitive substances and lifting handle. The system also has a water cooling coil for automatically cooling the agar temperature to dispensing temperature after sterilisation. Maximum sterilisation temperature: 125 °C.

- Compact structure, stainless steel housing (AISI 304) and internal chamber
- User instruction printed on the panel
- Electromagnetic agitation system
- Control panel with digital display of sterilisation time and set/actual temperature
- Strict control of sterilisation parameters for production reproducibility

Model	Agarster Eco Mini
Weight (kg)	25
W×D×H (mm)	440×440×530

Description	Pk	Cat. No.
Agarster Eco Mini media preparator, complete with electrical cable and plug (220 V/50 Hz/1600 W)	1	**710-0865**

Description	Pk	Cat. No.
Accessories		
"Cream Four" stainless steel additional basket	1	**710-0885**
"Smart-Print" printer	1	**710-0881**

Gravimetric dilutor, IUL Pinch Dilutor

Equipment specifically designed to facilitate the controlled addition of media into a homogeniser/lab blender bag using a load cell. The Pinch Dilutor constantly monitors the weight in the homogeniser bag and consequently distributes the precise quantity of diluent into the bag.

- Ideal for dilution of solid and semi-solid samples
- Simple to operate and control dilution with pinch valve
- Smooth, silent and fast process
- Contact parts and tubing can easily be disassembled and sterilised in an autoclave

Model	Pinch Dilutor
Accuracy	<±0,2 g
Dilution Factor	1:2 up to 1:50
Max. weight (g)	2000
Weight (kg)	6,5
W×D×H (mm)	240×300×810

Description	Pk	Cat. No.
Pinch Dilutor	1	**710-0862**

Handheld airborne particle counters, MET One HHPC

Quickly check or validate ISO Class 5 (FED STD Class 100) or higher cleanrooms and controlled environments. The easy to read, high resolution display is fully configurable, showing only the required data in a clear large font. At only 680 g the slim design of MET One HHPC+ allows single-handed operation. Perfect for effortless troubleshooting of filter leaks in mini environments and workstations. Save analysis time with on-the-spot process profiling to pinpoint particle events. Download to Excel® via Ethernet using industry standard browsers (Internet Explorer®, Safari®, Firefox®, etc.). Plug a USB memory stick in the MET One HHPC+ to transfer your particle data direct to a PC. Plug it in like a camera, the data appears in Excel®. The optional charging cradle provides PC access to particle counting data via ports for Ethernet or USB cables. Leaving the unit on the cradle in the cleanroom ensures the unit is fully charged and ready for use at all times.

- Simple and fast
- Lightweight and comfortable
- Visual particle trending
- Easy data download

Delivery information: The systems are delivered with hard shell carrying case (optional for HHPC 2+), universal 110/240 V, 12 VDC power supply/charger, zero count inlet filter, zero count filter adapter, USB-A to MINI-B-5P cable (1,83 m) with ferrite. The HHPC 6+ is also delivered with charging and communications cradle, without ethernet cable.

Model	MET One HHPC 2+, two channel (0,5 - 5 µm)	MET One HHPC 3+, three channel (0,3 - 10 µm)	MET One HHPC 3+, three channel (0,5 - 5 µm)	MET One HHPC 6+, six channel (0,3 - 10 µm)
Airflow rate	2,83 l/min, 0,5 µm/min	2,83 l/min, 0,3 µm/min	2,83 l/min, 0,5 µm/min	2,83 l/min, 0,3 µm/min
Material	Polycarbonate			
Power	110/240 V			
W×D×H (mm)	99×53×272			
Weight (kg)	0,68			

Description	Pk	Cat. No.
MET One HHPC 2+, two channel (0,5 - 5 µm)	1	**710-0980**
MET One HHPC 3+, three channel (0,3 - 10 µm)	1	**710-0979**
MET One HHPC 3+, three channel (0,5 - 5 µm)	1	**710-0981**
MET One HHPC 6+, six channel (0,3 - 10 µm)	1	**710-0982**

Description	Pk	Cat. No.
Accessories		
Hard shell carrying case	1	**710-0983**
Charging and communications cradle without cable	1	**710-0984**
Zero count filter adapter	1	**710-0985**
Universal 110/240 V, 12 VDC power supply charger	1	**705-0745**
USB-A to MINI-B-5P cable 6' with ferrite	1	**705-0746**
CAT-5E 7' ethernet cable	1	**705-0747**
CAT-5E 7' ethernet cable, shielded grey	1	**705-0748**
User manual	1	**710-0986**
Zero count inlet filter	1	**661-0154**

Bench top densitometer for measuring turbidity of cell suspensions, DEN-1 and DEN-1B

Grant

DEN-1

DEN-1B

Compact densitometers for measuring turbidity of cell suspensions in a range of life science applications, ideal for measurements on the bench or in cold rooms, incubators and workstations. The densitometers are designed for measurement of solution's turbidity in the range 0,3 - 5,0 McFarland units (100×10^6 to 150×10^7 cells/ml) but both the DEN-1 and the DEN-1B provide the opportunity to measure solution turbidity in a wider range (5.0 - 15.0 McFarland units) however, it is necessary to remember that in this case the standard deviation values increase.

- Small, lightweight, easy to use instruments
- Rapid, clear results displayed digitally in McFarland units
- Battery operated DEN-1B is convenient for use in remote areas without power
- Factory calibrated - retains calibration without power supply
- Can be user calibrated with commercial standards or cell suspensions prepared in the laboratory

Recommended external diameter of tubes is 18 mm

Delivery information: Instruments supplied with a D16 adapter for Ø 16 mm tubes.

* Precision at full scale deflection. Standard deviation 3,0 ±0,1 McF

Model	DEN-1B	DEN-1
Light source	Light emitting diode (LED)	
Response time	1 second	
Range	0,00 - 15,00 McFarland units (McF)	0,3 - 15,0 McFarland units (McF)
Accuracy	±3%*	
Resolution	0,01 McF	0,1 McF
Sample volume (ml)	≥2	
Calibration	Factory calibrated	
Power supply	3× AA batteries or external power supply	12 V, 300 mA
W×D×H (mm)	165×115×75	
Weight (kg)	0,7	

Description	Pk	Cat. No.
Portable, suspension turbidity meter, DEN-1B, battery operated, with mains adaptor EU-, UK- and CH-plugs	1	**614-0235**
Bench top, suspension turbidity meter, DEN-1 with EU-, UK- and CH-plugs	1	**614-0234**

Histology water bath, W20

The reliable W20 histology water bath is ideal for removing wrinkles and distortions in paraffin wax sections which are created during sectioning. The unit's low profile is ergonomic, provides a clear view and allows safe handling of the sections. The indirectly heated flat areas at the front and back of the bath provide a suitable space for drying up to 20 slides. The touch temperature adjustment and power On/Off switch with a control light for "On" mode, are conveniently located at the front of the unit and protected from water.

- Electronic touch display
- Lightweight, compact and efficient size means it is easy to empty out water
- Double function with heated surface for drying up to 20 slides
- Adjustable temperature range 30 to 70 °C
- Optional lid to prevent evaporation and dust contamination when not in use

Ordering information: Supplied without lid which, if required, must be ordered separately.

Temperature range (°C)	30...70
Thermostat	Digital
Accuracy (°C)	±1
Exterior W×D×H (mm)	247×280×78
Internal W×D×H (mm)	198×156×60
Weight (kg)	2,4
Power	190 W

Description	Pk	Cat. No.
Histology bath W20, UK-plug	1	**720-2685**

Description	For	Pk	Cat. No.
Accessories			
Lid	W20 histology bath	1	**720-2424**

Heated forceps, Speci®-Ceps

The Speci®-Ceps are electrically heated forceps designed for the preparation of histological or histopathological slides. To prevent the cold tips of normal forceps from solidifying the liquid wax medium, it is necessary to repeatedly remove the forceps from the work and heat them by external means - in a flame or embedding centre. The Speci®-Ceps incorporate safe, low-voltage, energy controlled heating elements which constantly maintain their tips at the optimum temperature for manipulation of specimens in histological wax.

- Continuous use, without adjustment, and without influencing the temperature of the medium or tissue
- Eliminate the need to keep forceps at a usable temperature, enables the operator to concentrate on orientation of the tissue
- Results in a significant increase in productivity

Length: 160 mm

Description	Colour	Ø (mm)	Pk	Cat. No.
Heated forceps	Red	1	1	**720-2750**
Heated forceps	Yellow	2	1	**720-2752**
Heated forceps	Blue	4	1	**720-2753**
Complete set incl. control unit, power supply, red and yellow forceps			1	**720-2751**

Description	Pk	Cat. No.
Accessories		
Control unit only	1	**720-2754**
Power supply	1	**720-2755**

Hotplate for histology slides, W10

The W10 heating plate with its sleek, compact design accommodates two rows of up to 40 slides in total. The heating plate is very useful as a stretch bench for mounting, stretching and drying paraffin sections on slides, fixing bacterial smears and heating fluid samples in Petri dishes. The black anodised surface provides an excellent visual contrast. The 8 mm thick aluminium heating plate ensures a constant and homogenous temperature over the entire heating surface. The touch display and switch are protected from water and paraffin, the unit has over-temperature protection for extra safety. The temperature adjustment and power On/Off switch with control light for "On" mode are conveniently located at the front of the unit.

- Electronic touch display
- Sleek and compact
- Ideal size for drying up to 40 slides
- Temperature range 30 to 89 °C

IP protection class according to DIN EN 60529: IP 21

Temperature range (°C)	RT*...89
Thermostat	Digital
Accuracy (°C)	±1,0
Exterior W×D×H (mm)	146x486x70
Weight (kg)	3,1
Power	260 W

Description	Pk	Cat. No.
Heating plate for slides W10, UK-plug	1	**720-2684**

* RT = Ambient

Round tissue bath

Eliminate wrinkles and distortion during the preparation of paraffin embedded tissue sections. The bath surface is black ceramic coated steel for improved visibility of tissue sections. The bath has a separate on/off switch, pilot light, and thermostat. The wide, flat edge serves as a convenient drying surface for processed slides.

- Durable and inexpensive
- Rapid heat-up
- Easy to clean and maintain

Delivery information: Equipped with pilot light, dust cover, thermometer holder and non-skid rubber feet

Temperature range (°C)	35...65
Thermostat	Analogue
Accuracy (°C)	±1
Ø×H	11×5,1 cm
Weight (kg)	2,3
Power	230 V, 50/60 Hz, 190 W

Description	Pk	Cat. No.
Tissue bath , UK	1	**720-1337**

Wax dispenser
Electrothermal

This apparatus ensures an immediate and continuous supply of melted paraffin wax at the correct temperature. The dispenser capacity is 4,5 litres. It has an aluminium construction with anodised inner case, black polypropylene lid and base. The swivel non-drip tap has a built in replaceable filter and a 24 W element to stop wax solidifying at the point of dispensing.

- Temperature variable from ambient to 75 °C
- Over-temperature cut-out at 105 °C

Weight: 4,5 kg

Description	Pk	Cat. No.
Wax dispenser, EU and UK plug	1	**720-0002**

Description	Pk	Cat. No.
Accessories		
Filter pack	1	**631-1220**

Slide drying bench
Electrothermal

The bench has a capacity of fifty 26×76 mm slides, which are placed directly on the warming plate or on the adjustable support rods, either horizontally or angled to permit drainage.

- Temperatures up to 100 °C
- Speeds up section mounting

Weight: 1,8 kg; 180×390×95 mm

Description	Pk	Cat. No.
Drying bench, EU/UK-plug	1	**720-0000**
Spare heater	1	**631-1241**

Rotary microtome, HM 325
Thermo Scientific

Cut high-quality paraffin sections without a power supply with the robust HM 325 rotary microtome. The HM 325 features retraction at the return travel to protect the specimen and manual coarse advance for fast working.

- One-handed zero orientation head
- Quick trim button
- Section counter
- Guide rail guidance for the knife holder
- Large, easy-to-clean waste tray extends below the blade holder

Delivery information: Delivered without blade or knife holder.

Please contact your local VWR office for details of knives, blades and a full range of accessories.

Description	W×D×H (mm)	Weight (kg)	Pk	Cat. No.
Rotary microtome, HM 325	420×490×280	23	1	**720-2704**

Electronic rotary microtome, HM 340 E
Thermo Scientific

The HM 340 E is an ergonomically designed electronic rotary microtome. It features stepping-motor advance technology which provides superior sectioning results. Designed for precision and stability, it yields quality ribbons even for difficult to cut sections. Applications range from paraffin sectioning in routine and research laboratories to plastic embedded specimens. The integrated waste tray captures excess paraffin debris to the rear of the blade holder for quick and easy cleaning. To guarantee safe specimen transfer the hand wheel brake locks in any position and the protective blade guard allows operation without exposing a blade edge.

- Selectable retraction
- Specimen advance (specimen moves toward the knife)
- One-handed zero orientation head
- Menu driven control panel that can be used on either side of the instrument

Delivery information: The HM 340 E microtome is supplied with 100 ml PARA/Gard™, standard tools, brushed aluminium plate cover, dust cover, and instruction manual.

Please contact your local VWR office for details of knives, blades and a full range of accessories.

Description	Pk	Cat. No.
Electronic rotary microtome, HM 340 E	1	**720-2705**

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Rotary microtome, HM 355S
Thermo Scientific

The HM 355S rotary microtome is a universal heavy duty microtome for specially sophisticated paraffin and hard sectioning techniques in biology, medicine and industry. User selected cutting window control maximises throughput by allowing the return stroke to be faster than the optimised cutting stroke. Emergency stop immediately cuts power to the motor. For viewing commands five languages are available. The display monitors a range of functions including cutting speed, section count, section thickness and advance distance.

- Excellent for routine paraffin sections and plastic-embedded specimens
- High quality sections with less fatigue
- Unmatched safety, ease-of-use, reliability and consistency of results
- Instant switch between trim and section settings with independently selectable trim and section speeds
- Rock option: specimen head advances by a set amount to trim specimens without turning the handwheel through full turns
- Selectable retraction feature guide rail guidance

Section thickness range: 0,5 µm to 100 µm in 0,5 µm increments

Cutting stroke: 72 mm

Please contact your local VWR office for details of knives, blades and a full range of accessories.

Description	W×D×H (mm)	Weight (kg)	Pk	Cat. No.
Rotary microtome, HM 355S	410×520×280	35	1	**720-2706**

Sliding microtome, HM 430
Thermo Scientific

The HM 430 sliding microtome is a highly efficient sliding microtome for paraffin and frozen sections in routine biological, botanical, and materials science applications. Highest precision and stability guarantee fast, safe and comfortable operation. The roller-guided knife sledge results in smooth running of the knife sledge for comfortable and non-tiring working with highest stability. The elegant housing is streamlined and includes all ergonomic aspects for a comfortable, intuitive working environment.

- Excellent cutting options
- Use for paraffin and frozen sections in biological, botanical, and materials science applications
- Easy selection of manual or automatic advance
- Integrated, removable waste tray
- Specimen fine orientation on X/Y axes
- With memory function and graphical display in two different sizes

Section thickness range: 0 µm to 60 µm in 1 µm increments

Cutting stroke: 40 mm

Please contact your local VWR office for details of knives, blades and a full range of accessories.

Description	W×D×H (mm)	Weight (kg)	Pk	Cat. No.
Sliding microtome, HM 430	310×480×320	26	1	**720-2707**

Sliding microtome, HM 450
Thermo Scientific

Section paraffin and frozen sections in biological, botanical and materials science applications with the Thermo Scientific™ HM 450 sliding microtome. This microtome includes automatic fine sectioning and trimming features with selectable specimen retraction. The integrated knife carrier design of the HM 450 sliding microtome ensures fast, comfortable and non tiring operation. The automatic feed facilitates sectioning by a reproducible exact feed. The feed process is carried out by the reversing movement of the sledge after any sectioning move. This way, large specimens as well as biopsies can be sectioned with the respective adjusted length of sectioning travel, without having to pass a defined feed point.

- Excellent cutting options
- Use for paraffin and frozen sections in biological, botanical and materials science applications
- Easy selection of manual or automatic advance
- Integrated, removable waste tray
- Specimen fine orientation on X/Y axes
- With memory function and graphical display in two different sizes

Section thickness range: 1 to 60 µm in 1 µm increments

Cutting stroke: 40 mm

Please contact your local VWR office for details of knives, blades and a full range of accessories.

Description	W×D×H (mm)	Weight (kg)	Pk	Cat. No.
Sliding microtome, HM 450	380×480×320	26	1	**720-2708**

Vibrating blade microtome, HM 650 V

Thermo Scientific

Cut fixed and unfixed tissue samples as well as non biological specimens with the HM 650V vibrating blade microtome. Its patented vibrating system, which is completely resistant to wear, reduces artefacts by minimising the friction on the cells due to the vibrating blade. The distortion of the vibrating blade in the z-axis is stabilised via a harmonious vibration. The cooling of the buffer solution and the specimen is guaranteed via special cooling elements. The cooling element has an insertion for a thermometer. This way, the temperature of the buffer solution can easily be controlled. The buffer tray including chuck can freely be rotated by 330°. Up to 10 stored, operator defined working settings can be called up individually and used again for sectioning. Each operator has the possibility to store their individual basic settings and use them. Four different languages are available for the software: German, English, French and Spanish. Different blades and knives can be inserted by changing one part of the blade carrier only, e.g. sapphire knife, injector blades or razor blades.

- Precise vibrating system produces minimal deflection, ensuring optimal specimen integrity
- Plug and play system does not require time consuming deflection adjustments for each different sample type
- Sectioning and operational parameters can be stored and recalled
- Micrometer and vibration systems enclosed in an ergonomically designed housing
- Three modes of operation: semi-manual, single and continuous

Section thickness range: 0 µm to 1500 µm in 1 µm increments

Cutting stroke: 45 mm

Delivery information: The instrument includes: Basic instrument without large field magnifier and cold light source, cooling element with buffer solution, removable buffer tray with cooling blocks, specimen stages, tool shelf, dust cover and instruction manual.

Please contact your local VWR office for details of knives, blades and a full range of accessories.

Description	W×D×H (mm)	Weight (kg)	Pk	Cat. No.
Vibrating blade microtome, HM 650V	380×520×280	38	1	**720-2709**

Microtomes, M3500

The Bright M3500 has been developed to make a flat cutting radial action wax microtome available to histologists at a realistic price. The design incorporates specific features to enable the user to cut sections quickly, easily, safely and comfortably. It is available with a range of accessories, including specimen orientation, motorised advance/rewind and a Lever Release Feather™ Blade Holder.

- Flat cut radial action for superb results
- Uses solid knives or disposable blades
- Can be used from front or side
- Large integral debris tray takes control of waste
- Debris/safety visor

Section thickness range: Standard range 0 to 30 µm in 1 µm increments

Cutting stroke: 57 mm

Max specimen size: 25×30 mm

Max. head advance: 25 mm at 0° knife tilt angle

Description	W×D×H (mm)	Weight (kg)	Pk	Cat. No.
Radial microtome with standard knife holder and cassette quick release holder	450×440×300	26	1	**720-1716**

Description	Pk	Cat. No.
Accessories		
Anti-static brush, 12mm	1	**720-1741**
Feather™ disposable blades	1	**720-1734**
Knife cleaning brush	1	**720-1740**
Knife sharpening back	1	**720-1736**
Knife sharpening kit	1	**720-1738**
Lever Release Feather™ Blade Holder	1	**720-1742**
Motorised advance/rewind	1	**720-1757**
Standard knife with box, C-profile, 189x27x10 mm, 22° angle, safety cut-outs at each end	1	**720-1758**
Standard vice clamp (can be fitted instead of quick release cassette holder at no extra cost)	1	**720-1756**
Steel knife with box, D-profile, 240x33x13 mm, 22 ° angle	1	**720-1732**

Cryostat, CryoStar™ NX70
Thermo Scientific

Accommodate the needs of both research and clinical laboratories with the CryoStar™ NX70. The NX70 introduces a form-fitting design, integrated height control and motorised sectioning. Rapid Response Temperature Control adjusts quickly to settings changes and maintains temperature through periods of high-volume use. Motorised cutting reduces user fatigue and avoids repetitive motion injury. Independent blade holder and object cooling keeps cutting area at set temperatures even during periods of high use. Cross-roller bearing design provides years of maintenance-free operation.

- Innovative design
- Form-fitting shape
- Unparalleled sectioning quality

Please contact your local VWR office for details of knives, blades and a full range of accessories.

Fine section thickness range	0,5 - 100 µm
Fine section thickness resolution	0,5 to 5 µm in 0,5 µm steps, 5 to 10 µm in 1 µm steps, 10 to 20 µm in 2 µm steps, 20 to 50 µm in 5 µm steps, 50 to 100 µm in 10 µm steps
Trim thickness range	5 - 500 µm
Trim thickness resolution	0,5 to 5 µm in 0,5 µm steps, 5 to 10 µm in 1 µm steps, 10 to 20 µm in 2 µm steps, 20 to 50 µm in 5 µm steps, 50 to 100 µm in 10 µm steps
Vertical specimen stroke	64 mm
Horizontal specimen movement	48 mm
Specimen orientation	x- and y- axes universal 7° with zero positioning; z-axis up to 360°
Specimen approach manual	3 mm/s max. (variable speed by joystick control)
Cutting window	Manually adjusted to specimen size
Operating modes	Interval, single, multi- and continuous-stroke
Cutting speed	0 - 256 mm/s
Specimen temperature control	-50 to +10 °C
Blade temperature control	-35 to -5 °C
Cryobar cooling	Max. -60 °C at -35 °C blade temperature
Defrosting options	Programmed / Immediate
Specimen retraction	20 µm
Lighting	LED
Coarse feed	Motorised (on/off)
Clearance angle adjustment	Disposable blade carrier 8 to 16°

Description	W×D×H (mm)	Weight (kg)	Pk	Cat. No.
Cryostat, Cryostar™ NX70 with cold disinfection	755×1000×1120	200	1	**720-2712**
Cryostat, Cryostar™ NX70 with Vacutome	755×1000×1120	200	1	**720-2713**
Cryostat, Cryostar™ NX70 with Vacutome and cold disinfection	755×1000×1120	200	1	**720-2714**

Cryostat, HM525 NX
Thermo Scientific

Deliver high quality, routine results comfortably and efficiently with the Microm HM525 NX, a high performance routine cryostat with intuitive software and touch screen for simple, efficient operation. The HM525 NX cryostat combines the proven operation and reliability of the HM525 and the ergonomics and intuitive interface of the new NX series cryostats. 27 cooled specimen positions, including 4 fast freeze, to keep up with heavy workloads. The front of the microtome is a new design that stops build up of debris behind the microtome making it easier to clean. Integrated peltier cools four fast-freezing stations to -57 °C to limit ice crystal formation within the specimen. An additional knee space supports comfortable seated operation. 10 minute specimen fast-freeze function can be accessed from the menu.

- Exceptional sectioning quality and reliability
- Intuitive user interface
- Enhanced ergonomics
- User friendly touch screen interface
- Operator safety
- Minimal service downtime

Section thickness range: 1 µm to 500 µm

Optional UV disinfection: High intensity UV light delivers disinfection for peace of mind and enhanced germicidal activity; immediate or scheduled operation; alert screen indicates incomplete or interrupted disinfection cycle and adjustable disinfection time setting up to 300 minutes.

Please contact your local VWR office for details of knives, blades and a full range of accessories.

Description	W×D×H (mm)	Weight (kg)	Pk	Cat. No.
Cryostat, HM525 NX	640×760×1150 (excludes handwheel)	143	1	**720-2710**
Cryostat, HM525 NX with UV	640×760×1150 (excludes handwheel)	143	1	**720-2711**

Cryostat, OTF5000

Based on the long-established and reliable OTF/AS cryostat, the Bright OTF5000 incorporates the latest blade systems in the ever-reliable and powerful 5040 microtome. Available in three configurations. The Standard models include Quick Freezer, internal shelves, evaporator defrost, manual cutting system, 5040 microtome with fixed head, heated window surround, window demist system, analogue defrost clock, side mounted non-urgent controls and a full set of accessories. In addition to the Standard model features the LS models offer fine object orientation, motorised advance/rewind (two speed) with auto-reset and specimen temperature control, fast reacting from –5 °C to minimum chamber temperature. HS models have, in addition to LS model specifications, a section counter with six digit LCD display, dual refrigeration with auto compressor switchover for –40 °C chamber temperature and motor drive for automation of cutting process with variable speed control. All three models are available with Quick Release Feather™ Blade Holder complete with anti-roll plates (37 and 50 mm) and ten Feather™ blades, instead of standard knife block and standard knife. The OTF5000 is suitable for a wide range of applications and, in the correct configuration, is capable of cutting a diverse range of specimen types, from undecalcified bone to brain, resins, plastics and plant tissue, as well as more usual soft tissue. The OTF5000 allows full anti-roll plate adjustment for perfect results, coupled with flexible temperature control and long lasting temperature stability, and is suitable for research and clinical operation.

- Utilises standard knives or disposable blades, with Lever Release Feather™ Blade Holder available as an accessory for those who wish to use both
- Quick Freezer and automatic evaporator defrost supplied as standard
- Non-urgent functions on side panel
- Long list of options and accessories

Section thickness range: 0,5 µm to 30 µm in 0,5 µm increments

Cutting stroke: 56 mm

Max specimen size: 50×70 mm

Description	W×D×H (mm)	Weight (kg)	Pk	Cat. No.
HS cryostat with standard knife block	880×1250×840	120	1	**720-1703**
HS cryostat with Quick Release Feather™ Blade Holder	880×1250×840	120	1	**720-1704**
LS cryostat standard knife block	880×1250×840	120	1	**720-1705**
LS cryostat with Quick Release Feather™ Blade Holder	880×1250×840	120	1	**720-1706**
Standard cryostat with standard knife block	880×1250×840	120	1	**720-1707**
Standard cryostat with Quick Release Feather™ Blade Holder	880×1250×840	120	1	**720-1708**

Description	Pk	Cat. No.
Accessories		
Easi-set anti-roll plate, 37 mm	1	**720-1699**
Easi-set anti-roll plate, 50 mm	1	**720-1700**
Easi-set anti-roll plate, 75 mm	1	**720-1701**
Low height version	1	**720-1695**
Low speed/high torque motor drive	1	**720-1697**
Low temperature dual refrigeration system (–45 °C)	1	**720-1696**
Object holder, 22 mm diameter, short	1	**720-1760**
Object holder, 37 mm diameter, long	1	**720-1702**
Orientating object holder, with fine adjustment screws	1	**720-1759**
UV decontamination system	1	**720-1698**

Container with cap for biopsy probes, Q Path®

Q Path® container (PP) with suitable caps (PE) for safe transport of biopsy probes.

- Different colours
- High impermeability

Capacity (ml)	Cap colour	Pk	Cat. No.
20	White	800	**216-1307**
20	Blue	800	**216-1315**
20	Yellow	800	**216-1317**
60	White	300	**216-1306**
60	Blue	300	**216-1309**
150	White	250	**216-1308**
150	Blue	250	**216-1319**

Cassettes, Q Path® MacroStar I, in dispenser

Acetal polymer. Suitable for holding and identifying tissue samples in processing, embedding and sectioning procedures. Suitable for stainless steel lids. Resistant to all commonly used histological solvents. Cassettes with tape (= rack) for Leica and Sakura cassettes printers. Rack with 40 cassettes.

- Large opening for the filtration of fluids
- Without lid, with 34 holes
- Designed to accept standard metal lids (M481)
-
- Slanted writing surface (45° angle) accepts markings easily
- Colour coded

Colour	Pk	Cat. No.
White	4.000	**720-2373**
Green	4.000	**720-2374**
Pink	4.000	**720-2375**
Yellow	4.000	**720-2376**
Blue	4.000	**720-2377**
Grey	4.000	**720-2378**
Orange	4.000	**720-2379**
Red	4.000	**720-2380**
Lavender	4.000	**720-2381**

Cassettes, Q Path® MicroStar II, in dispenser

Acetal polymer. Suitable for holding and identifying tissue samples in processing, embedding and sectioning procedures. Resistant to all commonly used histological solvents. Cassettes with tape (= rack) for Leica and Sakura cassette printers and separate disposable lid, supplied in racks with 40 cassettes.

- Small opening for the filtration of fluids
- With hinge and separate lid
- 45° writing angle

Colour	Pk	Cat. No.
White	2.000	**720-2382**
Green	2.000	**720-2383**
Pink	2.000	**720-2384**
Yellow	2.000	**720-2385**
Blue	2.000	**720-2386**
Grey	2.000	**720-2387**
Orange	2.000	**720-2388**
Red	2.000	**720-2389**
Lavender	2.000	**720-2390**

Cassettes, Q Path® Microtwin, in dispenser

Acetal polymer. Suitable for holding and identifying tissue samples in processing, embedding and sectioning procedures. Resistant to all commonly used histological solvents. Cassette with mounted disposable lid, supplied in racks with 40 cassettes for Leica and Sakura cassette printers.

- No biopsy pads, biopsy capsules or filter paper needed
- Surface area of pore: 0,3×0,3 mm^2
- With hinge
- 45° writing angle

Colour	Pk	Cat. No.
White	2.000	**720-2400**
Green	2.000	**720-2401**
Pink	2.000	**720-2402**
Yellow	2.000	**720-2403**
Blue	2.000	**720-2404**
Grey	2.000	**720-2405**
Orange	2.000	**720-2406**
Red	2.000	**720-2407**
Lavender	2.000	**720-2408**

Cassettes, Q Path® MacroStar II, in dispenser

Acetal polymer. Suitable for holding and identifying tissue samples in processing, embedding and sectioning procedures. Resistant to all commonly used histological solvents. Cassettes with tape (= rack) for Leica and Sakura cassette printers. Rack of 40 cassettes.

- Large opening for the filtration of fluids
- With hinge and separate lid
- 45° writing angle

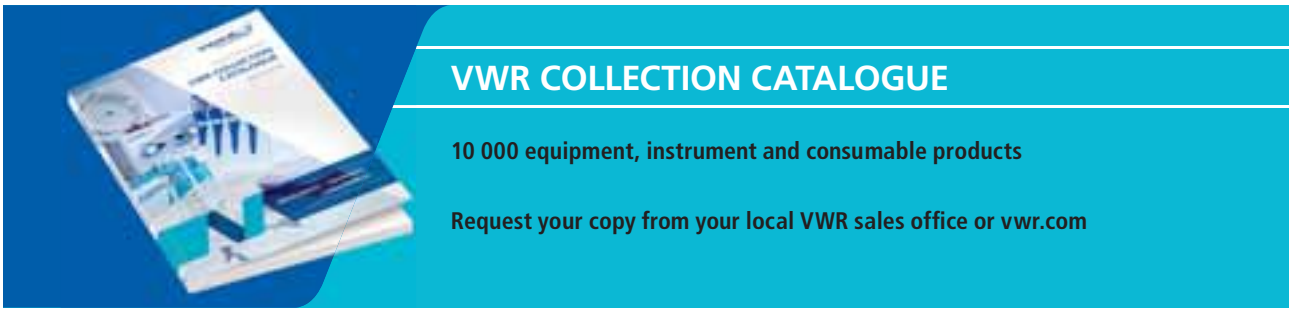
Colour	Pk	Cat. No.
White	2.000	**720-2391**
Green	2.000	**720-2392**
Pink	2.000	**720-2393**
Yellow	2.000	**720-2394**
Blue	2.000	**720-2395**
Grey	2.000	**720-2396**
Orange	2.000	**720-2397**
Red	2.000	**720-2398**
Lavender	2.000	**720-2399**

Biopsy cassettes

Biopsy cassettes.

- Three different sizes available

Description	Pk	Cat. No.
Biopsy cassettes, medium	1	**720-2425**
Biopsy cassettes, small	1	**720-2426**
Biopsy cassettes, big	1	**720-2427**



IVD

Embedding cassettes, M480
Simport

Acetal polymer

- Resistant to all commonly used histological solvents
- Suitable for holding and identifying tissue samples in processing, embedding and sectioning procedures
- Designed to accept standard metal lids (M481)
- Slanted writing surface (45° angle) accepts markings easily
- Colour coded

Colour	Pk	Cat. No.
Lilac	1.500	720-0829
Orange	1.500	720-0830
Aqua	1.500	720-0831
Colourless	1.500	720-0828
White	1.500	720-0832
Pink	1.500	720-0833
Green	1.500	720-0834
Yellow	1.500	720-0835
Blue	1.500	720-0836
Salmon	1.500	720-0837
Cream	1.500	720-0838
Grey	1.500	720-0839

Description	Pk	Cat. No.
Accessories		
Metal lid	25	720-0403

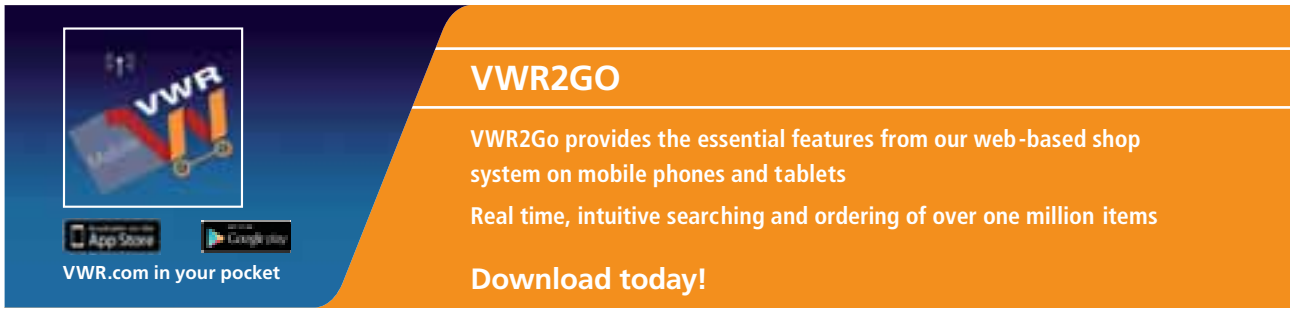
IVD

Tissue processing/embedding cassettes, Histosette® I, M490
Simport

Acetal polymer

- Resistant to histological solvents
- Flow-through slots maximise fluid exchange and ensure proper drainage
- Integral lid eliminates the need for separate steel lids
- 30° writing angle

Colour	Pk	Cat. No.
Lilac	1.500	720-0884
Orange	1.500	720-0885
Aqua	1.500	720-0886
White	1.500	720-0887
Pink	1.500	720-0888
Green	1.500	720-0889
Yellow	1.500	720-0890
Blue	1.500	720-0891
Salmon	1.500	720-0892
Beige	1.500	720-0893
Grey	1.500	720-0894



IVD

Biopsy processing/embedding cassettes, Histosette® I, M491
Simport

Acetal polymer

- Resistant to all commonly used histological solvents
- Square openings (1 mm) to maximise fluid exchange and ensure proper drainage
- Integral lid
- Anterior writing area at a 30° angle

Colour	Pk	Cat. No.
White	1.500	**720-0898**
Pink	1.500	**720-0899**
Green	1.500	**720-0900**
Yellow	1.500	**720-0901**
Blue	1.500	**720-0902**
Salmon	1.500	**720-0903**
Beige	1.500	**720-0904**
Grey	1.500	**720-0905**
Lilac	1.500	**720-0895**
Orange	1.500	**720-0896**
Aqua	1.500	**720-0897**

IVD

Tissue processing/embedding cassettes, Histosette® I, M498
Simport

Acetal polymer

- Resistant to histological solvents
- Flow-through slots maximise fluid exchange and ensure proper drainage
- Integral lid
- With a 45° angle writing area to enable use with some automated cassette labelling instruments

Colour	Pk	Cat. No.
Lilac	1.500	**720-0930**
Orange	1.500	**720-0931**
Aqua	1.500	**720-1534**
White	1.500	**720-0932**
Pink	1.500	**720-0933**
Green	1.500	**720-0934**
Yellow	1.500	**720-0935**
Blue	1.500	**720-0936**
Salmon	1.500	**720-0937**
Beige	1.500	**720-0938**
Grey	1.500	**720-0939**

IVD

Biopsy processing/embedding cassettes, Histosette ® I M499
Simport

Acetal polymer

Disposable cassettes similar to M498 series but specially designed to hold biopsy specimens during the embedding process.

- No need for biopsy pads
- Square openings (1 mm) to maximise fluid exchange and to ensure proper drainage
- Integral lid
- With a 45° angle writing area to enable use with some automated cassette labelling instruments

Colour	Pk	Cat. No.
Lilac	1.500	**720-0940**
Orange	1.500	**720-0941**
Aqua	1.500	**720-1538**
White	1.500	**720-0942**
Pink	1.500	**720-0943**
Green	1.500	**720-0944**
Yellow	1.500	**720-0945**
Blue	1.500	**720-0946**
Peach	1.500	**720-1542**
Beige	1.500	**720-0947**
Grey	1.500	**720-0948**

IVD

Tissue processing/embedding cassettes, Histosette® II, M492
Simport

Acetal polymer

- Resistant to the chemical action of histological solvents
- Flow-through slots maximise fluid exchange
- Integral lid
- Anterior writing area at 45° angle to enable use with leading cassette labelling instruments

Colour	Pk	Cat. No.
Lilac	1.500	720-0906
Orange	1.500	720-0907
Aqua	1.500	720-0908
White	1.500	720-0909
Pink	1.500	720-0910
Green	1.500	720-0911
Yellow	1.500	720-0912
Blue	1.500	720-0913
Peach	1.500	720-1528
Beige	1.500	720-0914
Grey	1.500	720-0915

IVD

Biopsy processing/embedding cassettes, Histosette® II, M493
Simport

Acetal polymer

- No need for biopsy pads
- Resistant to most commonly used histological solutions
- Integral lid
- Anterior writing area 45° angle suitable for some labelling systems

Colour	Pk	Cat. No.
Lilac	1.500	720-0916
Orange	1.500	720-0917
Aqua	1.500	720-0918
White	1.500	720-0919
Pink	1.500	720-0920
Green	1.500	720-0921
Yellow	1.500	720-0922
Blue	1.500	720-0923
Salmon	1.500	720-0924
Beige	1.500	720-0925
Grey	1.500	720-0926

IVD

Biopsy processing/embedding cassettes, Microsette® I M502
Simport

Acetal polymer

- No need for biopsy pads
- Large compartment 25×30 mm
- 2000 holes (Ø 0,26 mm) suitable for needle biopsies
- Integral lid
- Anterior writing area 45° angle suitable for some labelling systems

Colour	Pk	Cat. No.
Lilac	1.000	720-0949
Orange	1.000	720-0950
Aqua	1.000	720-0309
White	1.000	720-0951
Pink	1.000	720-0952
Green	1.000	720-0953
Yellow	1.000	720-0954
Blue	1.000	720-0955
Salmon	1.000	720-0956
Beige	1.000	720-0957
Grey	1.000	720-0958

IVD

Biopsy processing/embedding cassettes, Microsette® M503
Simport

Acetal polymer

- No need for biopsy pads
- Six compartments, each 7×12 mm, numbered 1 - 6
- 2000 square openings (each 0,26 mm) to maximise fluid exchange
- Integral lid
- Anterior writing area 45° angle suitable for some labelling systems

Colour	Pk	Cat. No.
Lilac	1.000	720-0959
Orange	1.000	720-0960
Aqua	1.000	720-1546
White	1.000	720-0961
Pink	1.000	720-0962
Green	1.000	720-0963
Yellow	1.000	720-0964
Blue	1.000	720-0965
Salmon	1.000	720-0966
Beige	1.000	720-1029
Grey	1.000	720-0967

IVD

Biopsy processing/embedding cassettes, Micromesh® M507
Simport

Acetal polymer

- No need for biopsy pads
- Large square compartment, 27 mm², suitable for needle biopsies
- 1676 square openings (0,38 mm²) allow improved fluid exchange
- Integral lid
- Anterior writing area 45° angle suitable for some labelling systems

Colour	Pk	Cat. No.
Lilac	1.000	720-0968
Orange	1.000	720-0969
Aqua	1.000	720-0970
White	1.000	720-0971
Pink	1.000	720-0972
Green	1.000	720-0973
Yellow	1.000	720-0974
Blue	1.000	720-0975
Salmon	1.000	720-0976
Beige	1.000	720-0977
Grey	1.000	720-0978

IVD

Biopsy processing/embedding cassettes, Micromesh™ M508
Simport

Acetal polymer

- No need for biopsy pads
- Cassettes have four square compartments each 13 mm
- Cover and base have about 1676 square openings to maximise fluid exchange
- Integral lid
- Anterior writing area 45° angle suitable for some labelling systems

Colour	Pk	Cat. No.
Lilac	1.000	720-0979
Orange	1.000	720-0980
Aqua	1.000	720-0981
White	1.000	720-0982
Pink	1.000	720-0983
Green	1.000	720-0984
Yellow	1.000	720-0985
Blue	1.000	720-0986
Salmon	1.000	720-0987
Beige	1.000	720-0988
Grey	1.000	720-0989

IVD

Tissue processing/embedding cassettes, Macrosette®, M512
Simport

Acetal polymer

- Disposable plastic cassettes designed to hold larger tissue specimens - same size as Histosette® cassette but twice as deep (12 mm)
- Highly resistant to histological solvents
- Flow-through slots maximise fluid exchange
- Integral lid
- Front face inclined 45° to be usable with leading automatic labelling systems

W×D×H: 41,1×28,5×13 mm

Packaging: Each case contains three boxes holding 250 cassettes each.

Colour	Pk	Cat. No.
White	750	**720-1627**

IVD

Tissue processing/embedding cassettes, Histosette® II, M485
Simport

Acetal polymer

Similar to M492, but covers are already removed from cassettes and are packed separately in the case.

- Convenient for cassette labelling instruments as the covers are already removed
- Resistant to the chemical action of histological solvents
- Flow-through slots maximise fluid exchange

Colour	Pk	Cat. No.
Lilac	1.000	**720-0223**
Orange	1.000	**720-0224**
Aqua	1.000	**720-0225**
White	1.000	**720-0226**
Pink	1.000	**720-0227**
Green	1.000	**720-0228**
Yellow	1.000	**720-0229**
Blue	1.000	**720-0230**
Salmon	1.000	**720-0231**
Beige	1.000	**720-0232**
Grey	1.000	**720-0233**

IVD

Biopsy processing/embedding cassettes, Histosette® II, M486
Simport

Acetal polymer

Designed to hold biopsy specimens. Covers are already removed from cassettes and are packaged separately in the case.

- Convenient for cassette labelling instruments as the covers are already removed
- Resistant to the chemical action of histological solvents
- Flow-through slots maximise fluid exchange

Colour	Pk	Cat. No.
Lilac	1.000	**720-1500**
Orange	1.000	**720-0234**
Aqua	1.000	**720-0235**
White	1.000	**720-0236**
Pink	1.000	**720-0237**
Green	1.000	**720-0238**
Yellow	1.000	**720-0239**
Blue	1.000	**720-0240**
Salmon	1.000	**720-0241**
Beige	1.000	**720-0242**
Grey	1.000	**720-0243**

IVD

Biopsy processing/embedding cassettes, Swingsette®, M518
Simport

Acetal polymer

Most convenient for cassette labelling instruments since the covers are packaged separately in the case. These biopsy cassettes are similar to the M517 series but are especially designed to hold biopsy specimens during the processing/embedding process as well as in storage cabinets. This new model differs by the special hinge that holds the base and cover together. This hinge allows cassettes to be opened and closed as often as necessary. The cover can be removed and re-inserted easily without danger of specimen loss. Three frosted writing surfaces are made available, including the anterior one at a 45° angle. Available in several colours.

- Moulded from a special high-density polymer, they keep specimens safely submerged in liquid
- Totally resistant to the chemical action of histological solvents
- The efficient flow-through slots maximise fluid exchange and ensure proper drainage
- The special hinge make it easy to attach lid to base

Packaging: Each case contains two dispenser boxes of 500 cassettes and one box of 1000 covers.

Colour	Pk	Cat. No.
Lilac	1.000	**720-1670**
Orange	1.000	**720-1671**
Aqua	1.000	**720-1672**
White	1.000	**720-1676**
Pink	1.000	**720-1677**
Green	1.000	**720-1678**
Yellow	1.000	**720-1679**
Blue	1.000	**720-1680**
Peach	1.000	**720-1681**
Beige	1.000	**720-1682**
Grey	1.000	**720-1683**

IVD

E-Z Load™ Histosette® II M482 & M483, E-Z Load™ QuickLoad™ M485SL & M486SL
Simport

Acetat polymer. E-Z Load™ Histosette® II cassettes are designed for loading the Micro Writer® and Shur/Mark® cassette labelling instruments in one simple operation. Supplied in stacks of 50 cassettes, no manual insertion, one cassette at a time, is required. Just load the stack in the magazine, cut and remove the holding tie and place in the labelling instrument ready for printing. Moulded from a special high-density polymer, these cassettes keep specimens safely submerged in liquid and are totally resistant to the chemical action of histological solvents. The efficient flow-through slots maximise fluid exchange and ensure proper drainage. Available in non cytotoxic, non metallic colours. Anterior printing area is at a 45° angle, offering an unobstructed view of the writing surface and making the cassette perfectly suitable to be used with cassette labelling instruments. Two types of lids are available. The one piece disposable plastic cover eliminates the need for reusable steel lids. It can be opened and closed as often as necessary and always relocks securely without danger of specimen loss.

- Disposable plastic cassette resistant to the chemical action of histological solvents
- Simple snap apart and convenient to lock lid
- Biopsy model (M483) designed to hold small biopsy samples
- Anterior writing area at a 45° angle

Size of the cassettes: 40×50 mm

Packaging: Inner packed in stacks of 50. Pack contains two boxes of 20 stacks.

Colour	Pk	Cat. No.
Tissue cassette bases M482		
Lilac	1.000	**720-0840**
Orange	1.000	**720-0842**
Aqua	1.000	**720-0844**
White	1.000	**720-0846**
Pink	1.000	**720-0848**
Green	1.000	**720-0850**
Yellow	1.000	**720-0852**
Blue	1.000	**720-0854**
Peach	1.000	**720-0856**
Cream	1.000	**720-0858**
Grey	1.000	**720-0860**
Tissue cassette covers M482		
Lilac	1.000	**720-0841**
Orange	1.000	**720-0843**
Aqua	1.000	**720-0845**
White	1.000	**720-0847**

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Colour	Pk	Cat. No.
Tissue cassette covers M482		
Pink	1.000	**720-0849**
Green	1.000	**720-0851**
Yellow	1.000	**720-0853**
Blue	1.000	**720-0855**
Peach	1.000	**720-0857**
Tan	1.000	**720-0859**
Grey	1.000	**720-0861**
Biopsy cassette bases M483		
Lilac	1.000	**720-0862**
Orange	1.000	**720-0864**
Aqua	1.000	**720-0866**
White	1.000	**720-0868**
Pink	1.000	**720-0870**
Green	1.000	**720-0872**
Yellow	1.000	**720-0874**
Blue	1.000	**720-0876**
Peach	1.000	**720-0878**
Tan	1.000	**720-0880**
Grey	1.000	**720-0882**
Biopsy cassette covers M483		
Lilac	1.000	**720-0863**
Orange	1.000	**720-0865**
Aqua	1.000	**720-0867**
White	1.000	**720-0869**
Pink	1.000	**720-0871**
Green	1.000	**720-0873**
Yellow	1.000	**720-0875**
Blue	1.000	**720-0877**
Peach	1.000	**720-0879**
Tan	1.000	**720-0881**
Grey	1.000	**720-0883**
Tissue cassettes (with cover) in QuickLoad™ sleeves, M485SL		
Lilac	750	**720-1207**
Orange	750	**720-1208**
Aqua	750	**720-1209**
White	750	**720-1210**
Pink	750	**720-1211**
Green	750	**720-1212**
Yellow	750	**720-1213**
Blue	750	**720-1214**
Biopsy cassettes (with cover) in QuickLoad™ sleeves, M486SL		
Lilac	750	**720-1215**
Orange	750	**720-1216**
Aqua	750	**720-1217**
White	750	**720-1218**
Pink	750	**720-1219**
Green	750	**720-1220**
Yellow	750	**720-1221**
Blue	750	**720-1222**

IVD

Tissue cassettes, Slimsette™, in QuickLoad™ sleeves, M509SL
Simport

Acetal polymer

The transparent sleeve allows viewing of cassettes in order to confirm there is no jam in the sleeve during the printing process. This model is similar to the M507 cassette but is intended for tissue processing/ embedding procedures. The efficient flow-through slots maximise fluid exchange and ensure proper drainage. Lids can be opened and closed as often as necessary and they always relock securely without danger of specimen loss. When ready for the embedding process, covers can conveniently be snapped off and discarded.

- Large labelling areas are located on three sides of the cassette
- Anterior writing area at a 45° angle
- Available in several non-cytotoxic, non-metallic colours

Packaging: Each case contains 10 sleeves of 75 cassettes.

Colour	Pk	Cat. No.
Lilac	750	**720-1421**
Orange	750	**720-1423**
Aqua	750	**720-1425**
White	750	**720-1430**
Pink	750	**720-1432**
Green	750	**720-1434**
Yellow	750	**720-1436**
Blue	750	**720-1438**
Peach	750	**720-1440**
Tan	750	**720-1442**
Grey	750	**720-1444**

IVD

Tissue cassettes, Slimsette™, in QuickLoad™ stacks, M509T
Simport

Acetal polymer

To be used with Leica and Sakura Ink Jet printers. Moulded from a special high density acetal polymer, they keep specimens safely submerged and are totally resistant to the chemical action of solvents used in histology laboratories. The efficient flowthrough slots maximise fluid exchange and ensure proper reagent drainage. The cover does not protrude above the cassette, a great space saving feature.

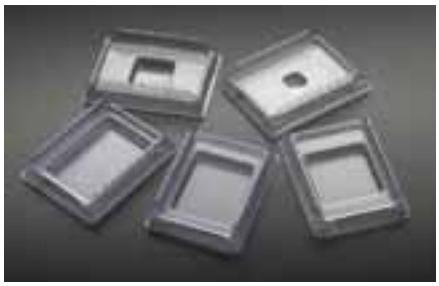
- The one-piece disposable plastic cover is pre-installed on each cassette
- Eliminates the need for reusable steel lids
- The cover can be opened and closed as often as necessary and will always relock

Packaging: Cassettes are packaged in stacks of 40. Each case contains 50 stacks for a total of 2000 cassettes.

Colour	Pk	Cat. No.
Lilac	2.000	**720-1422**
Orange	2.000	**720-1424**
Aqua	2.000	**720-1426**
White	2.000	**720-1431**
Pink	2.000	**720-1433**
Green	2.000	**720-1435**
Yellow	2.000	**720-1437**
Blue	2.000	**720-1439**
Peach	2.000	**720-1441**
Tan	2.000	**720-1443**
Grey	2.000	**720-1445**

IVD

Disposable base moulds
Simport



PS

- Convenient
- Smooth interior finish with rounded corners for specimen removal

Description	Dimensions (mm)	Pk	Cat. No.
Mould, plastic	7×7×5	1.000	**720-0820**
Mould, plastic	15×15×5	1.000	**720-0821**
Mould, plastic	24×24×5	1.000	**720-0822**
Mould, plastic	30×24×5	1.000	**720-0823**
Mould, plastic	37×24×5	1.000	**720-0824**
Mould, plastic	37×24×10	500	**720-0208**

IVD

Embedding rings
Simport

PS

- These embedding rings are suitable for holding and identifying tissue sample blocks and fit well in microtome chuck adapters
- The etched writing surface on the ring is marked with an identification number and placed on top of the sample block
- Additional paraffin is poured into the base mould to cement the ring onto the tissue block
- The embedding ring securely holds the tissue sample in the microtome chuck adapter for sectioning and then identifies the sample while in storage

Colour	Pk	Cat. No.
Pink	1.000	**720-0816**
Green	1.000	**720-0817**
Yellow	1.000	**720-0818**
Blue	1.000	**720-0819**
White	1.000	**720-0815**

Modular storage drawers
Simport

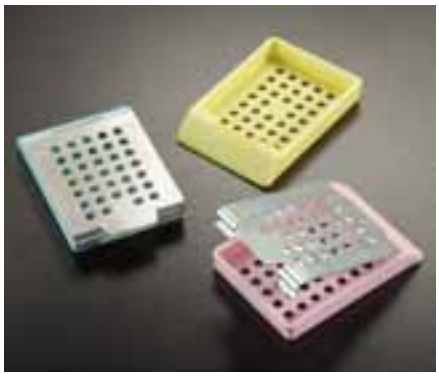
PS

- Permanent storage of up to 165 embedding rings or 250 cassettes per drawer
- Interlocking ridges for stacking
- Identification labels included

Description	Dimensions	Pk	Cat. No.
Drawers only	40,5×23×5,1 cm	6	**720-0280**
Drawers with 1500 embedding cassettes for M480	40,5×23×5,1 cm	6	**720-0281**
Drawers with 1500 embedding cassettes for M492	40,5×23×5,1 cm	6	**720-0282**
Drawers with 1500 embedding cassettes for M490	40,5×23×5,1 cm	6	**720-1501**
Drawers with 1000 embedding rings M460	40,5×23×5,1 cm	6	**720-1532**

IVD

Metal lid
Simport



Made of stainless steel. Metal lid for disposable embedding cassettes.

Description	Colour	Pk	Cat. No.
Metal lid	Silver	25	**720-0403**

Storage drawer
Simport

Durable, waterproof, heavy-duty cardboard

- Requires minimal space
- Label provided for each box allows recording of specimen number, date and type of specimen
- Each box can store up to 165 embedding rings or 250 cassettes

Description	Dimensions (mm)	Pk	Cat. No.
Durable waterproof drawer for long term storage	405×230×51	12	**720-0283**

Biopsy insert pads
Thermo Scientific

Polyester urethane foam. Biopsy material is placed between two sheets in processing cassette, and can then be processed in the normal way.

- Foam pads cut to the size of a processing cassette chamber

Dimensions: 26×31x2 mm

Description	Pk	Cat. No.
Biopsy insert pads	1.000	**720-0368**

Biopsy foam pads
Simport

Polyester urethane foam

Biopsy foam pads are used to hold biopsies in place and prevent them from being lost during processing. They are made of a specially formulated foam which is always verified for consistency throughout in order to achieve optimum solvent flow. Biopsy samples are sandwiched between two foam pads and are placed either in tissue capsules or cassettes with metal or plastic lids.

- Can resist temperatures from –40 to +121 °C

Continued on next page

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Description	Colour	Dimensions (mm)	Pk	Cat. No.
Biopsy sponge for cassette series: M480, M490, M491, M498, M499, M505, M506, M515, M516, M517 and M518	Blue	30,2×25,4×2	1.000	**720-0211**
Biopsy sponge for small capsules	Blue	25,4×2,7	1.000	**720-0400**
Biopsy sponge for large capsules	Blue	34,5×2	1.000	**720-0401**
Biopsy sponge for cassette series: M507, M509, M510	Blue	27,4×25,4×2	1.000	**720-1366**

Sampling brushes, Cytotak

Nylon-bristle cytology sampling brush mounted on standard plastic shaft, approximate length 150 mm.

• For cervical smears and other applications where it is desirable to recover whole cells

Dimensions: 26×31x2 mm

Description	Pk	Cat. No.
Cytotak, non-sterile, bulk	100	**720-0134**
Cytotak, sterile, peel pouch	125	**720-0135**
Cytotak, labelled tube	100	**720-0136**

VWR COLLECTION

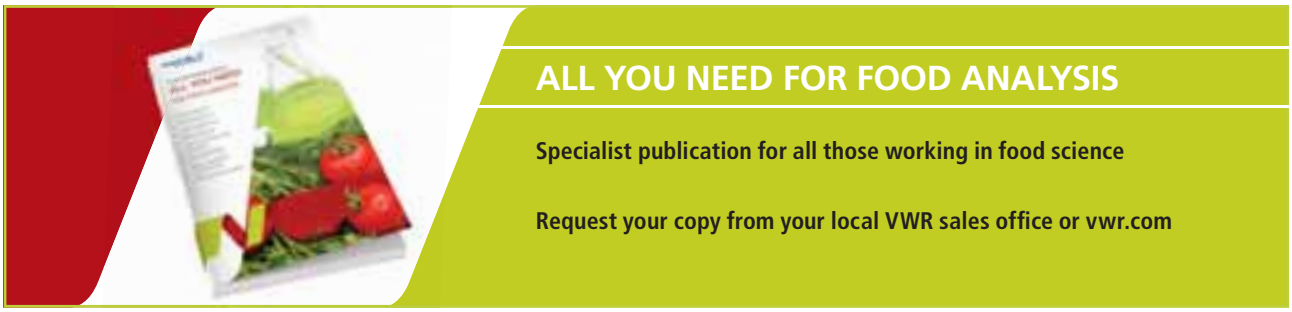
Cytological endo- and exocervical brushes, Q Path® NovaBrush®

Q Path® NovaBrush® are disposable brushes designed for endo- and exocervical cytological sampling. The shape of the head of the Q Path® NovaBrush® 1 makes it ideal for endocervical sampling without risk of trauma to the patient. With an undetachable handle (pink) the single use Q Path® NovaBrush® 1 is appropriate for conventional Pap smear testing and thin layer cytology. The Q Path® NovaBrush® 2 and 3 are suitable for both endo- and exocervical sampling. They have round pink (undetachable) or green (detachable) handles and an ergonomic design. Q Path® NovaBrush® 2 and 3 are recommended for liquid-based cytology.

The shape of the head of the Q Path® NovaBrush® 3 makes it particularly suitable for the collection of endocervical cells (especially in the case of cervical canal stenosis). The white brush can be detached from the green handle simply by pressing forward. The green handle has been designed to rotate during sampling in order to facilate collection of a high quality sample. The brush head is made of fibres of different lengths to allow simultaneous collection of endo and exocervical cells.

• CE brushes
• Available undetachable (pink colour) or detachable (green colour)
• Without metal, nylon or resin, 100% plastic
• Suitable for exo- or endocervical samples, except for Q Path NovaBrush® 1 (endocervical only)

Description	Material	Total length (mm)	Pk	Cat. No.
Endocervical brush Q Path® NovaBrush® 1, undetachable	Plastic	204	576	**720-2066**
Cervical brush Q Path® NovaBrush® 2, undetachable	Plastic	204	1.200	**720-2069**
Cervical brush Q Path® NovaBrush® 2, detachable	Plastic	204	1.200	**720-2067**
Cervical brush Q Path® NovaBrush® 2 individually packed, detachable	Plastic	204	500	**720-2068**
Cervical brush Q Path® NovaBrush® 3, detachable	Plastic	204	1.200	**720-2070**
Cervical brush Q Path® NovaBrush® 3 individually packed, detachable	Plastic	204	500	**720-2071**



Cassettes, Q Path® MacroStar I

Acetal polymer. Suitable for holding and identifying tissue samples in processing, embedding and sectioning procedures. Resistant to all commonly used histological solvents.Accepts standard stainless steel lids. Box of 4000 cassettes.

- Large opening for the filtration of fluids
- 45° writing angle
- Without lid
- With 34 holes

Colour	Pk	Cat. No.
Blue	4.000	720-2246
Green	4.000	720-2243
Grey	4.000	720-2247
Lavender	4.000	720-2250
Orange	4.000	720-2248
Pink	4.000	720-2244
Red	4.000	720-2249
White	4.000	720-2242
Yellow	4.000	720-2245

Cassettes, Q Path® MacroStar II

Acetal polymer. Suitable for holding and identifying tissue samples in processing, embedding and sectioning procedures. Resistant to all commonly used histological solvents. Cassettes in pre-filled dispensers for cassette burners. Pack of 2× 1000 cassettes and 1× 2000 lids.

- Large opening for the filtration of fluids
- With hinge and separate lid
- 45° writing angle

Colour	Pk	Cat. No.
Blue	2.000	720-2228
Green	2.000	720-2225
Grey	2.000	720-2229
Lavender	2.000	720-2232
Orange	2.000	720-2230
Pink	2.000	720-2226
Red	2.000	720-2231
White	2.000	720-2224
Yellow	2.000	720-2227

Cassettes, Q Path® MacroStar III

Acetal polymer. Suitable for holding and identifying tissue samples in processing, embedding and sectioning procedures. Resistant to all commonly used histological solvents. Disposable lid, supplied in dispenser for 500 cassettes. Packed 3 boxes of 500 pieces.

- Large opening for the filtration of fluids
- With mounted lid with hinges
- Writing area 45° angle suitable for all current printers

Colour	Pk	Cat. No.
Blue	1.500	720-2237
Green	1.500	720-2234
Grey	1.500	720-2238
Lavender	1.500	720-2241
Orange	1.500	720-2239
Pink	1.500	720-2235
Red	1.500	720-2240
White	1.500	720-2233
Yellow	1.500	720-2236

Cassettes, Q Path® MacroStar II, in sleeve

Acetal polymer. Suitable for holding and identifying tissue samples in processing, embedding and sectioning procedures. Resistant to all commonly used histological solvents. Cassettes in pre-filled sleeves for Thermo and RA Lamb cassette printers. Fifty dispensers with 80 cassettes and 2× 2000 lids.

- Large opening for the filtration of fluids
- With hinge and separate lid
- 45° writing angle

Colour	Pk	Cat. No.
Blue	4.000	720-2054
Green	4.000	720-2051
Grey	4.000	720-2055
Lavender	4.000	720-2058
Orange	4.000	720-2056
Pink	4.000	720-2052
Red	4.000	720-2057
White	4.000	720-2050
Yellow	4.000	720-2053

Cassettes, Q Path® MacroStar I, in sleeve

Acetal polymer. Suitable for holding and identifying tissue samples in processing, embedding and sectioning procedures. Resistant to all commonly used histological solvents. Cassettes in pre-filled sleeves for Thermo and RA Lamb cassette printers. Pack contains 37× dispensers with 80 cassettes and 1× dispenser with 40 cassettes.

- Large opening for the filtration of fluids
- 45° writing angle
- Without lid
- With 34 holes

Colour	Pk	Cat. No.
Blue	3.000	720-2036
Green	3.000	720-2033
Grey	3.000	720-2037
Lavender	3.000	720-2040
Orange	3.000	720-2038
Pink	3.000	720-2034
Red	3.000	720-2039
White	3.000	720-2032
Yellow	3.000	720-2035

Cassettes, Q Path® MacroStar V

Acetal polymer. Suitable for holding and identifying tissue samples in processing, embedding and sectioning procedures. Resistant to all commonly used histological solvents. Cassettes with welded disposable lid, supplied in dispensers for 500 cassettes. Packed 3 boxes with 500 cassettes.

- Easy to use cassette
- 45° writing area at the front and on both sides
- Cassettes with ridges, which makes it easier to be opened after impregnation

Colour	Pk	Cat. No.
Blue	1.500	720-2219
Green	1.500	720-2216
Grey	1.500	720-2220
Lavender	1.500	720-2223
Orange	1.500	720-2221
Pink	1.500	720-2217
Red	1.500	720-2222
White	1.500	720-2215
Yellow	1.500	720-2218

Cassettes, Q Path® MacroStar VI

Acetal polymer. Suitable for holding and identifying tissue samples in processing, embedding and sectioning procedures. Resistant to all commonly used histological solvents. Cassettes with welded lid, supplied in dispensers for 500 cassettes. Packed 3 boxes with 500 cassettes.

- With 30° angle
- Writing area at the front and on both sides
- Cassettes with ridges, which makes it easier to be opened after impregnation

Colour	Pk	Cat. No.
Blue	1.500	720-2178
Green	1.500	720-2175
Grey	1.500	720-2179
Lavender	1.500	720-2182
Orange	1.500	720-2180
Pink	1.500	720-2176
Red	1.500	720-2181
White	1.500	720-2174
Yellow	1.500	720-2177

Cassettes, Q Path® MacroStar V, in taped racks

Acetal polymer. Cassettes with welded disposable lid, supplied in racks for Leica and Sakura cassette printers. 2000 cassettes packed 40/rack.

- Easy to use cassette with large opening
- 45° writing area at the front and on both sides
- Cassettes with ridges, which makes it easier to be opened after impregnation

Colour	Pk	Cat. No.
Blue	2.000	720-2166
Green	2.000	720-2163
Grey	2.000	720-2167
Lavender	2.000	720-2170
Orange	2.000	720-2168
Pink	2.000	720-2164
Red	2.000	720-2169
White	2.000	720-2099
Yellow	2.000	720-2165

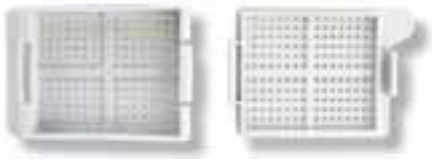
Mega cassettes, Q Path® MacroStar VIII

Acetal polymer. Suitable for holding and identifying large tissue samples in processing, embedding and sectioning procedures. Resistant to all commonly used histological solvents. Mega cassette with welded lid. Box of 100 cassettes.

- Extra large: 70×50×15 mm
- 45° writing angle

Colour	Pk	Cat. No.
Blue	100	720-2065
Green	100	720-2063
White	100	720-2062
Yellow	100	720-2064

Cassettes, Q Path® MicroStar II, in sleeve



Acetal polymer. Suitable for holding and identifying tissue samples in processing, embedding and sectioning procedures. Resistant to all commonly used histological solvents. Cassettes in pre-filled sleeves for Thermo and RA Lamb cassette printers. Fifty dispensers with 80 cassettes and 2× 2000 lids.

- Small opening for the filtration of fluids
- With hinge and separate lid
- 45° writing angle

Colour	Pk	Cat. No.
Blue	4.000	720-2045
Green	4.000	720-2042
Grey	4.000	720-2046
Lavender	4.000	720-2049
Orange	4.000	720-2047
Pink	4.000	720-2043
Red	4.000	720-2048
White	4.000	720-2041
Yellow	4.000	720-2044

Cassettes, Q Path® MicroStar II

Acetal polymer. Suitable for holding and identifying tissue samples in processing, embedding and sectioning procedures. Resistant to all commonly used histological solvents. Cassettes with separate disposable lid, supplied in distributing box with 2× 1000 cassettes and 1× 2000 lids. This cassette has been specially designed for cassette burners.

- Easy to use cassette with small opening
- With hinge and separate lid
- 45° writing angle
- Cassettes with ridges, which makes it easier to be opened after impregnation

Colour	Pk	Cat. No.
Blue	2.000	720-2076
Green	2.000	720-2073
Grey	2.000	720-2077
Lavender	2.000	720-2080
Orange	2.000	720-2078
Pink	2.000	720-2074
Red	2.000	720-2079
White	2.000	720-2072
Yellow	2.000	720-2075

Cassettes, Q Path® MicroStar III

Acetal polymer. Suitable for holding and identifying tissue samples in processing, embedding and sectioning procedures. Resistant to all commonly used histological solvents. Disposable lid, supplied in dispenser for 500 cassettes. Packed 3 boxes of 500 pieces.

- Small opening for the filtration of fluids
- With mounted lid with hinges
- Writing area 45° angle suitable for all current printers

Colour	Pk	Cat. No.
Blue	1.500	720-2085
Green	1.500	720-2082
Grey	1.500	720-2086
Lavender	1.500	720-2089
Opaque	1.500	720-2087
Pink	1.500	720-2083
Red	1.500	720-2088
White	1.500	720-2081
Yellow	1.500	720-2084

Cassettes, Q Path® MicroStar V

Acetal polymer. Suitable for holding and identifying tissue samples in processing, embedding and sectioning procedures. Resistant to all commonly used histological solvents. Cassettes with welded disposable lid, supplied in dispensers for 500 cassettes. Packed 3 boxes with 500 cassettes.

- Easy to use cassette with small opening
- Writing at the front and on both sides
- Cassettes with ridges, which makes it easier to be opened after impregnation

Colour	Pk	Cat. No.
Blue	1.500	720-2196
Green	1.500	720-2193
Grey	1.500	720-2197
Lavender	1.500	720-2205
Orange	1.500	720-2199
Pink	1.500	720-2194
Red	1.500	720-2198
White	1.500	720-2192
Yellow	1.500	720-2195

Cassettes, Q Path® MicroStar V, in racks

Acetal polymer. Suitable for holding and identifying tissue samples in processing, embedding and sectioning procedures. Resistant to all commonly used histological solvents. Cassettes with welded disposable lid, supplied in racks for Leica and Sakura cassette printers. 2000 cassettes packed 40/rack.

- Easy to use cassette with small opening
- Writing at the front and on both sides
- Cassettes with ridges, which makes it easier to be opened after impregnation

Colour	Pk	Cat. No.
Blue	2.000	720-2094
Green	2.000	720-2091
Grey	2.000	720-2095
Lavender	2.000	720-2098
Orange	2.000	720-2096
Pink	2.000	720-2092
Red	2.000	720-2097
White	2.000	720-2090
Yellow	2.000	720-2093

Cassettes, Q Path® Microtwin

Acetal polymer. Suitable for holding and identifying tissue samples in processing, embedding and sectioning procedures. Resistant to all commonly used histological solvents. Cassette with mounted disposable lid, supplied in dispenser. Cassettes with 2 compartments each with pores measuring precisely 0,09 mm^2. Packed 3 boxes with 500 cassettes.

- No biopsy pads, biopsy capsules or filter paper needed
- Surface area of pore: 0,3×0,3 mm
- With hinge
- 45° writing angle

Colour	Pk	Cat. No.
Blue	1.500	720-2187
Green	1.500	720-2184
Grey	1.500	720-2188
Lavender	1.500	720-2191
Orange	1.500	720-2189
Red	1.500	720-2190
White	1.500	720-2183
Yellow	1.500	720-2186

Cassettes, Q Path® MacroStar VII

Suitable for holding and identifying large tissue samples in processing, embedding and sectioning procedures. Resistant to all commonly used histological solvents. Supplied in dispensers containing 500 cassettes. Pack of 2 dispensers (1000 cassettes). Double height of the standard cassettes.

- Large cassette: 32×26×12 mm
- With welded lid
- 45° writing angle

Colour	Pk	Cat. No.
Blue	1.000	**720-2210**
Green	1.000	**720-2207**
Grey	1.000	**720-2211**
Lavender	1.000	**720-2214**
Orange	1.000	**720-2213**
Pink	1.000	**720-2208**
Red	1.000	**720-2212**
White	1.000	**720-2206**
Yellow	1.000	**720-2209**

Cassettes, Q Path® Microtwin, in racks

Acetal polymer. Suitable for holding and identifying tissue samples in processing, embedding and sectioning procedures. Resistant to all commonly used histological solvents. Cassette with mounted disposable lid, supplied in racks. Cassettes with 2 compartments each with pores measuring precisely 0,09 mm². 2000 cassettes packed 40/rack.

- No biopsy pads, biopsy capsules or filter paper needed
- Surface area of pore: 0,3×0,3 mm
- With hinge
- 45° writing angle

Colour	Pk	Cat. No.
Green	2.000	**720-2171**
Yellow	2.000	**720-2172**
Lavender	2.000	**720-2173**

Biopsy pads, Q Path®

Polyester urethane foam. To hold small biopsies in place and prevent them from being lost. Enables fluids to circulate freely during processing. Packed in bags of 500 pieces.

- Individually cut
- Ready to use
- Solvent resistent

Description	Colour	Pk	Cat. No.
Biopsy pads	Blue	500	**720-2254**
Biopsy pads	Black	500	**720-2255**

Formalin neutraliser pads, Q Path® Safety Pad

Absorbs the odours (neutralises formalin). Ensures good contrast for biopsies. Protects knives and cutting boards against premature wear.

- Different sizes available

Description	Dimensions (mm)	Pk	Cat. No.
Q Path® Safety Pad	203×254	25	**720-2251**
Q Path® Safety Pad	280×356	25	**720-2252**
Q Path® Safety Pad	406×485	25	**720-2253**

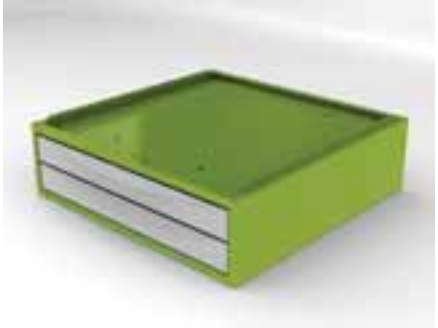
Filter cards for cytology centrifuges

Cyto-Strips made of filter board for cytocentrifuges. Absorption of excess liquids from the staining of samples in cytologic analysis. Can be used in Shandon and Sakura CytoTek® cytocentrifuges.

- For single chambers and multiple chambers

Description	Pk	Cat. No.
Cyto filter, high absorption, dual, one square hole, 63×26 mm	200	**720-2059**
Cyto filter, 2 round off-centre holes, 61×25 mm	200	**720-2060**
Cyto filter, 2 round centred holes, 76×26 mm	200	**720-2061**

Storage drawers, Q Path®



Storage organiser with two metal drawers to store embedding cassette.

- For 2×700 cassettes
- Weight: 16 kg

Description	Pk	Cat. No.
Organiser with two metal drawers, grey	1	**631-1072**

Storage drawers, Q Path®

Storage organiser with 2×4 metal drawers for embedding cassettes.

- For 2600 cassettes
- Weight: 18 kg

Description	Dimensions (mm)	Pk	Cat. No.
Organiser with eight metal drawers, grey	560×560×220	1	**631-1050**

Filing cabinet for cassettes, Q Path®

Filing cabinet in white cardboard.

- Supplied assembled
- Capacity of 410 cassettes

Packaging: With 2 drawers

Description	Colour	Dimensions (mm)	Pk	Cat. No.
Filing cabinet	White	315×255×120	2	**631-1065**

Filing cabinet for cassettes, Q Path®

Filing cabinet in kraft cardboard.

- Supplied unassembled
- Capacity of 500 cassettes

Description	Dimensions (mm)	Pk	Cat. No.
Filing cabinet	225×460×51	10	**631-1067**

Cytocuvette, Q Path®

The Q Path Cytocuvette® is a disposable plastic centrifugation chamber that is suitable for use with all cyto-centrifuges. The chamber has two compartments with lids and an attached filter with a large absorption capacity.

- Simple, easy to use
- Reduces cross-contamination risks
- Ideal for cyto-centrifugations of non gynaecological specimens

Description	Volume (µl)	Pk	Cat. No.
Q Path® Cytocuvette	100 - 800	600	**720-1999**

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Blood collection sets

Collection sets are available in different sizes, in standard version, with Luer adapter pre-assembled and with safety device to protect from needlestick injuries.

Sterile needles for multiple drawings in various sizes. The needles are available in standard version and preassembled on holders with safety device to protect from needlestick injuries called "Kima Safety".

Sterile Luer adapters to connect holders to collection sets.

With	Length (mm)	Pk	Cat. No.
Sterile blood collections sets			
butterfly needle 21G (Ø est. 0,80 x 20 mm length), green	300	100	**720-2780**
butterfly needle 23G (Ø est. 0,60 x 20 mm length), dark blue	300	100	**720-2756**
Sterile blood collection sets with pre-assembled Luer adapter			
butterfly needle 23G (Ø est. 0,60 x 20 mm length), dark blue	190	500	**720-2760**
butterfly needle 21G (Ø est. 0,80 x 20 mm length), green	300	100	**720-2775**
butterfly needle 23G (Ø est. 0,60 x 20 mm length), dark blue	300	100	**720-2776**
Sterile safety blood collection sets with pre-assembled Luer adapter			
butterfly needle 21G (Ø est. 0,80 x 20 mm length), green	190	100	**720-2749**
butterfly needle 23G (Ø est. 0,60 x 20 mm length), dark blue	300	100	**720-2779**
butterfly needle 21G (Ø est. 0,80 x 20 mm length), green	300	100	**720-2777**
butterfly needle 23G (Ø est. 0,60 x 20 mm length), dark blue	300	500	**720-2778**

Blood collection tubes with clot activator, vacuum, Vacutest®

PET, transparent

The test tubes are made from Polyethylene terephthalate (PET). Resistant to mechanical stress, centrifugation, breakage during standard procedures of use and in case of accidental falls. PET is a transparent material which enables the visual inspection of the blood and other biological liquids collected. Labels are made from self-adhesive paper for specific medical use, size 40x20 mm, printed in three colours.

The closure system of the test tubes is composed by a pierceable butyl rubber stopper and a polyethylene safety cap. The stopper has a hollow in the piercing spot to protect operator from possible contact. The safety cap protecting against the aerosol and splashes prevents the operator from coming into contact with the pierceable rubber stopper and allows for easy recapping of the test tube.

- Available in 3 sizes
- Colours of the closure system are compliant with ISO 6710 and EN 14820 standards for the identification of the tubes
- 18 months shelf-life

Volume (ml)	With	Length (mm)	Ø (mm)	Cap colour	Pk	Cat. No.
2	clot activator	75	13	Red	1.000	**720-2730**
3	clot activator	75	13	Red	1.000	**720-2763**
4	clot activator	75	13	Red	1.000	**720-2731**
6	clot activator	100	13	Red	100	**720-2734**
9	clot activator	100	16	Red	100	**720-2735**

Blood collection tubes with gel and clot activator, vacuum, Vacutest®

PET, transparent

The test tubes are made from Polyethylene terephthalate (PET). Resistant to mechanical stress, centrifugation, breakage during standard procedures of use and in case of accidental falls. PET is a transparent material which enables the visual inspection of the blood and other biological liquids collected. Labels are made from self-adhesive paper for specific medical use, size 40x20 mm, printed in three colours.

The closure system of the test tubes is composed by a pierceable butyl rubber stopper and a polyethylene safety cap. The stopper has a hollow in the piercing spot to protect operator from possible contact. The safety cap protecting against the aerosol and splashes prevents the operator from coming into contact with the pierceable rubber stopper and allows for easy recapping of the test tube.

- Available in 3 sizes
- Colours of the closure system are compliant with ISO 6710 and EN 14820 standards for the identification of the tubes
- 18 months shelf-life

Volume (ml)	With	Length (mm)	Ø (mm)	Cap colour	Pk	Cat. No.
3,5	gel and clot activator	75	13	Red	100	**720-2721**
3,5	gel and clot activator	75	13	Gold	100	**720-2726**
5	gel and clot activator	100	13	Red	500	**720-2722**
5	gel and clot activator	100	13	Gold	500	**720-2727**
5	gel and clot activator	100	13	Yellow	500	**720-2724**
5	gel and clot activator	100	13	Light Blue	500	**720-2729**
8	gel and clot activator	100	16	Red	500	**720-2723**
8	gel and clot activator	100	16	Gold	100	**720-2728**
8	gel and clot activator	100	16	Yellow	100	**720-2725**

Blood collection tubes with sodium citrate anticoagulant, vacuum, Vacutest®

PET, transparent

The test tubes are made from Polyethylene terephthalate (PET). Resistant to mechanical stress, centrifugation, breakage during standard procedures of use and in case of accidental falls. PET is a transparent material which enables the visual inspection of the blood and other biological liquids collected. Labels are made from self-adhesive paper for specific medical use, size 40x20 mm, printed in three colours.

The closure system of the test tubes is composed by a pierceable butyl rubber stopper and a polyethylene safety cap. The stopper has a hollow in the piercing spot to protect operator from possible contact. The safety cap protecting against the aerosol and splashes prevents the operator from coming into contact with the pierceable rubber stopper and allows for easy recapping of the test tube.

- Available in different sizes
- Colours of the closure system are compliant with ISO 6710 and EN 14820 standards for the identification of the tubes
- 18 months shelf-life

Volume (ml)	With	Length (mm)	Ø (mm)	Cap colour	Pk	Cat. No.
2,0	sodium citrate anticoagulant, 3,2 %	75	13	Translucent Blue	1.000	**720-2746**
3,5	sodium citrate anticoagulant, 3,2 %	75	13	Translucent Blue	100	**720-2748**
3,5	sodium citrate anticoagulant, 3,8 %	75	13	Translucent Blue	1.000	**720-2747**
4,0	sodium citrate anticoagulant, 3,2 %	75	13	Translucent Blue	1.000	**720-2774**
4,0	sodium citrate anticoagulant, 3,2 %	100	13	Translucent Blue	100	**720-2773**
5,0	sodium citrate anticoagulant, 3,8 %	100	13	Translucent Blue	100	**720-2772**

Blood collection tubes with sodium heparin, vaccum, Vacutest®

PET, transparent

The test tubes are made from Polyethylene terephthalate (PET). Resistant to mechanical stress, centrifugation, breakage during standard procedures of use and in case of accidental falls. PET is a transparent material which enables the visual inspection of the blood and other biological liquids collected. Labels are made from self-adhesive paper for specific medical use, size 40x20 mm, printed in three colours.

The closure system of the test tubes is composed of a pierceable butyl rubber stopper and a polyethylene safety cap. The stopper has a hollow in the piercing spot to protect operator from possible contact. The safety cap protecting against the aerosol and splashes prevents the operator from coming into contact with the pierceable rubber stopper and allows for easy recapping of the test tube.

- Available in 3 sizes
- Colours of the closure system are compliant with ISO 6710 and EN 14820 standards for the identification of the tubes
- 18 months shelf-life

Volume (ml)	With	Length (mm)	Ø (mm)	Cap colour	Pk	Cat. No.
4	Sodium Heparin	75	13	Green	1.000	**720-2690**
6	Sodium Heparin	100	13	Green	1.000	**720-2691**
9	Sodium Heparin	100	16	Green	1.000	**720-2692**

Blood collection tubes with gel and lithium heparin anticoagulant, vacuum, Vacutest®

PET, transparent

The test tubes are made from Polyethylene terephthalate (PET). Resistant to mechanical stress, centrifugation, breakage during standard procedures of use and in case of accidental falls. PET is a transparent material which enables the visual inspection of the blood and other biological liquids collected. Labels are made from self-adhesive paper for specific medical use, size 40x20 mm, printed in three colours.

The closure system of the test tubes is composed of a pierceable butyl rubber stopper and a polyethylene safety cap. The stopper has a hollow in the piercing spot to protect operator from possible contact. The safety cap protecting against the aerosol and splashes prevents the operator from coming into contact with the pierceable rubber stopper and allows for easy recapping of the test tube.

- Available in 3 sizes
- Colours of the closure system are compliant with ISO 6710 and EN 14820 standards for the identification of the tubes
- 18 months shelf-life

Volume (ml)	With	Length (mm)	Ø (mm)	Cap colour	Pk	Cat. No.
Lithium heparin anticoagulant						
2	lithium heparin anticoagulant	75	13	Green	1.000	**720-2736**
4	lithium heparin anticoagulant	75	13	Green	100	**720-2737**
9	lithium heparin anticoagulant	100	16	Green	1.000	**720-2738**
Gel and lithium heparin						
3,5	gel and lithium heparin anticoagulant	75	13	Green	100	**720-2739**
5	gel and lithium heparin anticoagulant	100	13	Green	100	**720-2740**

Blood collection tubes with EDTA anticoagulant, vacuum, Vacutest®

PET, transparent

The test tubes are made from Polyethylene terephthalate (PET). Resistant to mechanical stress, centrifugation, breakage during standard procedures of use and in case of accidental falls. PET is a transparent material which enables the visual inspection of the blood and other biological liquids collected. Labels are made from self-adhesive paper for specific medical use, size 40x20 mm, printed in three colours.

The closure system of the test tubes is composed of a pierceable butyl rubber stopper and a polyethylene safety cap. The stopper has a hollow in the piercing spot to protect operator from possible contact. The safety cap protecting against the aerosol and splashes prevents the operator from coming into contact with the pierceable rubber stopper and allows for easy recapping of the test tube.

- Available in different sizes
- Colours of the closure system are compliant with ISO 6710 and EN 14820 standards for the identification of the tubes
- 18 months shelf-life

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Volume (ml)	With	Length (mm)	Ø (mm)	Cap colour	Pk	Cat. No.
K2EDTA tube						
2	K2EDTA anticoagulant	75	13	Lavender	1.000	**720-2768**
3	K2EDTA anticoagulant	75	13	Lavender	100	**720-2744**
4	K2EDTA anticoagulant	75	13	Lavender	1.000	**720-2769**
6	K2EDTA anticoagulant	100	13	Lavender	100	**720-2745**
9	K2EDTA anticoagulant	100	16	Lavender	100	**720-2770**
K3EDTA tube						
1	K3EDTA anticoagulant	75	13	Lavender	1.000	**720-2765**
2	K3EDTA anticoagulant	75	13	Lavender	1.000	**720-2766**
3	K3EDTA anticoagulant	75	13	Lavender	1.000	**720-2741**
4	K3EDTA anticoagulant	75	13	Lavender	1.000	**720-2742**
6	K3EDTA anticoagulant	100	13	Lavender	1.000	**720-2743**
9	K3EDTA anticoagulant	100	16	Lavender	1.000	**720-2767**

Vacuum blood collection tubes, without additives, vacuum, Vacutest®

PET, transparent

The test tubes are made from Polyethylene terephthalate (PET). Resistant to mechanical stress, centrifugation, breakage during standard procedures of use and in case of accidental falls. PET is a transparent material which enables the visual inspection of the blood and other biological liquids collected. Labels are made from self-adhesive paper for specific medical use, size 40x20 mm, printed in three colours.

The closure system of the test tubes is composed of a pierceable butyl rubber stopper and a polyethylene safety cap. The stopper has a hollow in the piercing spot to protect operator from possible contact. The safety cap protecting against the aerosol and splashes prevents the operator from coming into contact with the pierceable rubber stopper and allows for easy recapping of the test tube.

- Available in different sizes
- Colours of the closure system are compliant with ISO 6710 and EN 14820 standards for the identification of the tubes
- 18 months shelf-life

Volume (ml)	Length (mm)	Ø (mm)	Cap colour	Pk	Cat. No.
4	75	13	White	1.000	**720-2693**
6	100	13	White	1.000	**720-2694**
9	100	16	White	1.000	**720-2695**

Veterinary blood collection tubes with clot activator, vacuum, Vacutest®

PET, transparent

The test tubes are made from Polyethylene terephthalate (PET). Resistant to mechanical stress, centrifugation, breakage during standard procedures of use and in case of accidental falls. PET is a transparent material which enables the visual inspection of the blood and other biological liquids collected. Labels are made from self-adhesive paper for specific medical use, size 40x20 mm, printed in three colours.

The closure system of the test tubes is composed of a pierceable butyl rubber stopper and a polyethylene safety cap. The stopper has a hollow in the piercing spot to protect operator from possible contact. The safety cap protecting against the aerosol and splashes prevents the operator from coming into contact with the pierceable rubber stopper and allows for easy recapping of the test tube.

- Available in different sizes
- Colours of the closure system are compliant with ISO 6710 and EN 14820 standards for the identification of the tubes
- 18 months shelf-life

Volume (ml)	With	Length (mm)	Ø (mm)	Cap colour	Pk	Cat. No.
4	clot activator	75	13	Red	5.000	**720-2732**
4,5	clot activator	75	13	Red	5.000	**720-2733**

Test tubes for pediatric blood takings with collection rim

PP, with transparent label

Microtest sterile pediatric test tubes size 14x45 mm. These test tubes can be adapted to an extender to bring the overall dimensions to 13x75 mm. This device enables use in standard centrifuges and preanalytical equipments.

Volume (µl)	With	Cap colour	Pk	Cat. No.
800	Gel and Clot activator	Red	100	**720-2697**
500	Clot activator	Red	100	**720-2698**
500	Lithium Heparin	Green	1.000	**720-2758**
800	Gel and Lithium Heparin	Light Green	50	**720-2759**
500	K3 EDTA	Lavender	50	**720-2699**
250	K2 EDTA	Lavender	50	**720-2700**
500	K2 EDTA	Lavender	50	**720-2701**
250	KF and Na2 EDTA	Grey	50	**720-2702**
500	Sodium citrate 3,2 %	Light Blue	50	**720-2703**

Description	Pk	Cat. No.
Test tubes extender		
Extender for micro test tubes, amber	1.000	**720-2757**
Extender for micro test tubes, green	1.000	**720-2696**

Safety holder with integrated and oriented needle

Sterile needles with safety device for blood collection.

- Different colours
- Different gauges

Description	Gauge	Ø×L (mm)	Colour	Pk	Cat. No.
Needle, pre-oriented	G 20	0,90×38	Yellow	25	**613-2963**
Needle, pre-oriented	G 21	0,80×38	Green	25	**613-2964**
Needle, pre-oriented	G 22	0,70×38	Black	25	**613-2965**
Needle, pre-oriented	G 20	0,90×25	Yellow	100	**613-2966**
Needle, pre-oriented	G 21	0,80×25	Green	100	**613-2967**
Needle, pre-oriented	G 22	0,70×25	Black	100	**613-2968**

ESA holder, single use

Description	Pk	Cat. No.
ESA 1 single use holder, PP	1.000	**613-2998**
ESA holder with safety device	100	**613-2999**

IVD

Micro capillaries, disposable, minicaps
Hirschmann Laborgeräte

Disposable capillary pipettes with the end-to-end system. With genuine Schott DURAN® borosilicate glass. Accuracy (from 5 µl) ± ≤0,5%, CV ± ≤1%. With batch number on the package.

- Correct filling of the capillary
- Conformity certified, according to the German "Eichordnung" certification
- Colour-coded vial cap with capillary dispenser
- Safe packaging for protection during transportation

Packaging: 100 minicaps packed in a glass vial with dispenser cap. 10 vials plus a pipetting device are packed into a outer carton.

Description	Length (mm)	Pk	Cat. No.
Length: 30 - 32 mm			
Sodium-heparinised minicaps, 5 µl	30 - 32	1.000	**612-2447**
Sodium-heparinised minicaps, 10 µl	30 - 32	1.000	**612-2448**
Sodium-heparinised minicaps, 25 µl	30 - 32	1.000	**612-2649**
Length: 100 mm			
Sodium-heparinised minicaps, 100 µl	100	1.000	**612-2650**

IVD

Micro haematocrit capillaries, disposable
Hirschmann Laborgeräte

Disposable capillaries for centrifugation of blood tests.

- Even and heavy wall thickness
- With printed colour-code

According to DIN 12846

Packaging: 100 pieces packed in a glass vial, 10 vials in a carton.

Description	Length (mm)	Ø int. (mm)	Ø ext. (mm)	Pk	Cat. No.
Without heparin, 60 µl	75	0,9/1,0	1,3/1,4	1.000	**612-3414**
Without heparin, 75 µl	75	1,1/1,2	1,5/1,6	1.000	**612-3417**
With sodium-heparin, 60 µl	75	0,9/1,0	1,3/1,4	1.000	**612-3418**
With sodium-heparin, 75 µl	75	1,1/1,2	1,5/1,6	1.000	**612-3419**
With ammonium-heparin, 18 µl	75	0,5/0,6	1,3/1,4	1.000	**612-3422**

IVD

Micro haematocrit capillaries
Brand

Without calibration mark. For use in haematocrit centrifuges.

- Heparinised or non-heparinised
- With colour code

Type A: heparinised with sodium heparinate over internal surface, red colour code, for capillary blood.

Type B: non-heparinised, blue colour code, for use with heparinised venous blood.

Thickness wall: 0,2 mm

According to DIN ISO 12772 and BS 4316 - 68.
CE marked according to IVD-Directive 98/79 EC

Description	Length (mm)	Ø int. (mm)	Ø ext. (mm)	Pk	Cat. No.
Type A	75	1,1 - 1,2	1,5 - 1,6	1.000	**521-9100**
Type B	75	1,1 - 1,2	1,5 - 1,6	1.000	**521-9102**

IVD

Haematocrit sealing compound
Brand

Non-drying cement on a plastic tray. For rapid sealing of several hundred micro haematocrit capillaries. Up to 24 capillaries can be placed vertically in numbered positions along the sides of the tray.

- Non-drying putty
- CE marked according to IVD-Directive 98/79 EC

Please note: Hold the capillaries (about 2/3 full) near the empty end and stick the empty end into the cement with a slight twist to seal it.

Description	Pk	Cat. No.
Sealing compound	10	**521-9105**

ALL YOU NEED FOR CHEMICAL ANALYSIS

A great companion for chemists in any industry

- Sampling and sample preparation
- Spectroscopy, chromatography and physical measurement
- Waste and hazard management

Request your copy from your local VWR sales office or vwr.com

IVD

Fixatives and reagents for microscopy

For full details of specification and hazards please see www.vwr.com or the VWR Chemicals catalogue.

Description	Pk	Cat. No.
Chromium(VI) oxide for analysis EMSURE®	250 g	**1.00229.0250**
di-Sodium tetraborate anhydrous for analysis	250 g	**1.06306.0250**
di-Sodium tetraborate anhydrous for analysis	1 kg	**1.06306.1000**
Formaldehyde solution 4%, buffered, pH 6,9 (approx. 10% Formalin solution) for histology (in plastic container)	5 l	**1.00496.5000**
Formaldehyde solution 4%, buffered, pH 6,9 (approx. 10% Formalin solution) for histology (in plastic container)	10 l	**1.00496.9010**
Formaldehyde solution 4%, buffered, pH 6,9 (approx. 10% Formalin solution) for histology (Titripac PE/Alu)	10 l	**1.00496.9011**
Formaldehyde solution min. 37%, free from acid for histology (with about 10% methanol)	1 l	**1.03999.1000**
Formaldehyde solution min. 37%, free from acid for histology (with about 10% methanol)	2,5 l	**1.03999.2500**
Formaldehyde solution min. 37%, free from acid for histology (with about 10% methanol)	25 l	**1.03999.9025**
Glutaraldehyde solution 25%	250 ml	**1.04239.0250**
Glutaraldehyde solution 25%	1 l	**1.04239.1000**
Glutaraldehyde solution 25%	2,5 l	**1.04239.2500**
Glutaraldehyde solution 25% according to P.J. Anderson	25 ml	**1.12179.0025**
Glutaraldehyde solution 25% according to P.J. Anderson	100 ml	**1.12179.0100**
Mercury(II) chloride for analysis EMSURE®, Reag. Ph. Eur., ACS	50 g	**1.04419.0050**
Mercury(II) chloride for analysis EMSURE®, Reag. Ph. Eur., ACS	250 g	**1.04419.0250**
Mercury(II) chloride for analysis EMSURE®, Reag. Ph. Eur., ACS	1 kg	**1.04419.1000**
M-FIX™ spray fixative for cytodiagnosis	100 ml	**1.03981.0102**
M-FIX™ spray fixative for cytodiagnosis	1 l	**1.03981.1000**
Osmic acid solution 2% for electron microscopy	5 ml	**1.09266.0005**
Osmium (VIII) oxide for microscopy	1 g	**1.24505.0001**
Osmium (VIII) oxide for microscopy	100 mg	**1.24505.0100**
Platinum (II) chloride (73% Pt) for synthesis	500 mg	**8.24566.0500**
Platinum (IV) chloride (57.5% Pt)	1 g	**8.07347.0001**
Potassium dichromate for analysis EMSURE® ACS, ISO, Reag. Ph. Eur.	500 g	**1.04864.0500**
Potassium dichromate for analysis EMSURE® ACS, ISO, Reag. Ph. Eur.	1 kg	**1.04864.1000**
Potassium dichromate for analysis EMSURE® ACS, ISO, Reag. Ph. Eur.	5 kg	**1.04864.5000**
Potassium permanganate for analysis EMSURE® ACS, Reag. Ph. Eur.	250 g	**1.05082.0250**
Potassium permanganate for analysis EMSURE® ACS, Reag. Ph. Eur.	1 kg	**1.05082.1000**
Silver nitrate for analysis EMSURE® ACS, ISO, Reag. Ph. Eur.	25 g	**1.01512.0025**
Silver nitrate for analysis EMSURE® ACS, ISO, Reag. Ph. Eur.	100 g	**1.01512.0100**
Silver nitrate for analysis EMSURE® ACS, ISO, Reag. Ph. Eur.	250 g	**1.01512.0250**
Silver nitrate for analysis EMSURE® ACS, ISO, Reag. Ph. Eur.	1 kg	**1.01512.1000**
Tris(hydroxymethyl)aminomethane, GR for analysis buffer substance ACS, Reag. Ph. Eur.	100 g	**1.08382.0100**
Tris(hydroxymethyl)aminomethane, GR for analysis buffer substance ACS, Reag. Ph. Eur.	500 g	**1.08382.0500**
Tris(hydroxymethyl)aminomethane, GR for analysis buffer substance ACS, Reag. Ph. Eur.	1 kg	**1.08382.1000**
Tris(hydroxymethyl)aminomethane, GR for analysis buffer substance ACS, Reag. Ph. Eur.	2,5 kg	**1.08382.2500**
Tungstophosphoric acid hydrate for analysis EMSURE®	100 g	**1.00583.0100**
Tungstophosphoric acid hydrate for analysis EMSURE®	250 g	**1.00583.0250**

General solvents and reagents for the cell diagnostic laboratory

For full details of specification and hazards please see www.vwr.com or the VWR Chemicals catalogue.

Description	Pk	Cat. No.
1-Propanol EMPLURA®	1 l	**1.00996.1000**
1-Propanol EMPLURA®	2,5 l	**1.00996.2500**
1-Propanol for analysis EMSURE® ACS, Reag. Ph. Eur.	1 l	**1.00997.1000**
1-Propanol for analysis EMSURE® ACS, Reag. Ph. Eur.	2,5 l	**1.00997.2500**
1-Propanol for analysis EMSURE® ACS, Reag. Ph. Eur.	25 l	**1.00997.6025**
2-Propanol for analysis EMSURE® ACS, ISO, Reag. Ph. Eur. (glass bottle)	1 l	**1.09634.1000**
2-Propanol for analysis EMSURE® ACS, ISO, Reag. Ph. Eur. (glass bottle)	2,5 l	**1.09634.2500**
2-Propanol for analysis EMSURE® ACS, ISO, Reag. Ph. Eur. (HDPE plastic bottle)	1 l	**1.09634.1011**
2-Propanol for analysis EMSURE® ACS, ISO, Reag. Ph. Eur. (HDPE plastic bottle)	2,5 l	**1.09634.2511**
2-Propanol for analysis EMSURE® ACS, ISO, Reag. Ph. Eur. (HDPE plastic bottle)	5 l	**1.09634.5000**
2-Propanol for analysis EMSURE® ACS, ISO, Reag. Ph. Eur. (steel barrel)	25 l	**1.09634.9025**
2-Propanol suitable for use as excipient EMPROVE® exp. Ph. Eur., BP, JP, USP	1 l	**1.00995.1000**
2-Propanol suitable for use as excipient EMPROVE® exp. Ph. Eur., BP, JP, USP	2,5 l	**1.00995.2500**
2-Propanol suitable for use as excipient EMPROVE® exp. Ph. Eur., BP, JP, USP	10 l	**1.00995.6010**
Acetic acid (glacial) 100%, EMPROVE® Ph. Eur., BP, JP, USP, E 260	2,5 l	**1.00056.2500**
Acetic acid (glacial) 100%, EMPROVE® Ph. Eur., BP, JP, USP, E 260	25 l	**1.00056.9025**
Acetic acid (glacial) 100% anhydrous for analysis EMSURE® ACS, ISO, Reag. Ph. Eur. (glass bottle)	1 l	**1.00063.1000**
Acetic acid (glacial) 100% anhydrous for analysis EMSURE® ACS, ISO, Reag. Ph. Eur. (glass bottle)	2,5 l	**1.00063.2500**
Acetic acid (glacial) 100% anhydrous for analysis EMSURE® ACS, ISO, Reag. Ph. Eur. (plastic container)	25 l	**1.00063.9026**
Acetone for analysis EMSURE® ACS, ISO, Reag. Ph. Eur.	180 l	**1.00014.9180**
Acetone for analysis EMSURE® ACS, ISO, Reag. Ph. Eur. (glass bottle)	1 l	**1.00014.1000**

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Description	Pk	Cat. No.
Acetone for analysis EMSURE® ACS, ISO, Reag. Ph. Eur. (glass bottle)	2,5 l	**1.00014.2500**
Acetone for analysis EMSURE® ACS, ISO, Reag. Ph. Eur. (HDPE plastic bottle)	5 l	**1.00014.5000**
Acetone for analysis EMSURE® ACS, ISO, Reag. Ph. Eur. (stainless steel drum)	10 l	**1.00014.6010**
Acetone for analysis EMSURE® ACS, ISO, Reag. Ph. Eur. (stainless steel drum)	25 l	**1.00014.6025**
Acetone suitable for use as excipient EMPROVE® exp. Ph. Eur., BP, JPE, NF	1 l	**1.00013.1000**
Acetone suitable for use as excipient EMPROVE® exp. Ph. Eur., BP, JPE, NF	2,5 l	**1.00013.2500**
Acetone suitable for use as excipient EMPROVE® exp. Ph. Eur., BP, JPE, NF	10 l	**1.00013.6010**
di-Sodium hydrogen phosphate anhydrous for analysis EMSURE® ACS, Reag. Ph. Eur.	500 g	**1.06586.0500**
di-Sodium hydrogen phosphate anhydrous for analysis EMSURE® ACS, Reag. Ph. Eur.	2,5 kg	**1.06586.2500**
di-Sodium hydrogen phosphate dihydrate for analysis EMSURE®	500 g	**1.06580.0500**
di-Sodium hydrogen phosphate dihydrate for analysis EMSURE®	1 kg	**1.06580.1000**
di-Sodium hydrogen phosphate dihydrate for analysis EMSURE®	5 kg	**1.06580.5000**
di-Sodium hydrogen phosphate solution, (buffer stock solution) 1/15 mol/l	1 l	**1.06587.1000**
Nitric acid 65%, extra pure	1 l	**1.00443.1000**
Nitric acid 65%, extra pure	2,5 l	**1.00443.2500**
Nitric acid 65% for analysis, EMSURE® ISO	1 l	**1.00456.1000**
Nitric acid 65% for analysis, EMSURE® ISO	2,5 l	**1.00456.2500**
Sodium carbonate anhydrous for analysis EMSURE® ISO	500 g	**1.06392.0500**
Sodium carbonate anhydrous for analysis EMSURE® ISO	1 kg	**1.06392.1000**
Sodium carbonate anhydrous for analysis EMSURE® ISO	5 kg	**1.06392.5000**
Sodium chloride EMSURE® ACS, ISO, Reag. Ph. Eur. analytical reagent	500 g	**1.06404.0500**
Sodium chloride EMSURE® ACS, ISO, Reag. Ph. Eur. analytical reagent	1 kg	**1.06404.1000**
Sodium chloride EMSURE® ACS, ISO, Reag. Ph. Eur. analytical reagent	5 kg	**1.06404.5000**
Sodium hydrogen for analysis carbonate EMSURE® ACS, Reag. Ph. Eur.	500 g	**1.06329.0500**
Sodium hydrogen for analysis carbonate EMSURE® ACS, Reag. Ph. Eur.	1 kg	**1.06329.1000**
Sodium hydrogen for analysis carbonate EMSURE® ACS, Reag. Ph. Eur.	5 kg	**1.06329.5000**
Sodium iodate for analysis EMSURE®	100 g	**1.06525.0100**
Sodium metabisulphite for analysis EMSURE® ACS, Reag. Ph. Eur.	100 g	**1.06528.0100**
Sodium metabisulphite for analysis EMSURE® ACS, Reag. Ph. Eur.	1 kg	**1.06528.1000**
Sodium metabisulphite for analysis EMSURE® ACS, Reag. Ph. Eur.	5 kg	**1.06528.5000**
Sodium periodate for analysis EMSURE® ACS, Reag. Ph. Eur.	50 g	**1.06597.0050**
Sodium periodate for analysis EMSURE® ACS, Reag. Ph. Eur.	250 g	**1.06597.0250**
Sodium periodate for analysis EMSURE® ACS, Reag. Ph. Eur.	1 kg	**1.06597.1000**
Trichloroacetic acid (glacial) for analysis EMSURE® ACS, Reag. Ph. Eur.	100 g	**1.00807.0100**
Trichloroacetic acid (glacial) for analysis EMSURE® ACS, Reag. Ph. Eur.	250 g	**1.00807.0250**
Trichloroacetic acid (glacial) for analysis EMSURE® ACS, Reag. Ph. Eur.	1 kg	**1.00807.1000**

IVD

Decalcifier solutions, OSTEOMOLL® and OSTEOSOFT®

Hard tissue like bones or teeth and all specimens of calcified tissue like bone marrow punches require special pretreatment before routine processing by an histological laboratory. OSTEOMOLL® decalcifies effectively and depending on the size and density of the tissue can be used twice provided that the solution is still clear after the first decalcification process. OSTEOSOFT® is used for gentle decalcification based on complex-forming agents particularly if it is to be followed by immunohistological procedures. For better differentiation from other working solutions OSTEOMOLL® is blue and OSTEOSOFT® is yellow.

Description	Pk	Cat. No.
OSTEOSOFT®, slow decalcifier	1 l	**1.01728.1000**

Staining reagents

Description	Pk	Cat. No.
Cryo-Jet Lamb`s freezing aerosol (form. R. A. Lamb)	275 ml	**361852T**
D.F.B. (decalcifying solution - H K Kristensons)	5 l	**352432C**
Formaldehyde 4%, pH 3.5 - 4.5 Gurr®	5 l	**361367L**
Formaldehyde 4%, pH 3.5 - 4.5 Gurr®	25 l	**361368M**
Formalin neutral sodium salt buffered pH 7.0 Gurr®	25 l	**351638K**
Glutaraldehyde solution for electron microscopy	100 ml	**360802F**
Glycerin albumen Gurr®	100 ml	**361002Y**
Glycerin albumen Gurr®	500 ml	**361004K**
Methanol, special quality	2,5 l	**360486N**
Polyester wax for microscopy (Steedman, Nature 1957,179,1345)	500 g	**360704E**

IVD

Staining solutions and kits for microscopy

The Gurr® range provides the first truly international standard for microscopical dyes and stains. Gurr® specifications have been devised by combining practical biological testing with absolute chemical criteria.

Description	Pk	Cat. No.
Elastin stain (Miller) (form. R.A. Lamb)	500 ml	**351154S**
Eosin yellowish for microscopical staining Gurr®	25 g	**341972Q**
Eosin yellowish for microscopical staining Gurr®	100 g	**341973R**
Eosin yellowish for microscopical staining Gurr®	1 kg	**341975T**
Feulgen stain (Schiff) (form. R.A. Lamb)	500 ml	**351204L**
Fuchsin (basic) for microscopical staining Gurr®	100 g	**340325K**
Giemsa`s stain improved R66 solution Gurr®	500 ml	**350864X**
Giemsa`s stain improved R66 solution Gurr®	1 l	**350865P**
Giemsa`s stain improved R66 solution Gurr®	25 l	**35086HE**
Giemsa`s stain solution	500 ml	**352603R**
Haemalum (Mayer`s) Gurr® for microscopical staining	500 ml	**350604T**
Haematoxylin (monohydrate) for microscopical staining Gurr®	25 g	**340374T**
Haematoxylin Harris (mercury-free)	1 l	**351945S**
Hema Gurr® rapid staining set for haematology	1	**351042L**
Leishman`s staining solution Gurr® for microscopical staining	500 ml	**350224L**
Lugol`s iodine solution	250 ml	**351903Y**
May-Grunwald`s eosin methylene blue solution	1 l	**352065W**
May-Grunwald`s stain (form. R.A.Lamb)	1 l	**351355C**
May-Grunwald`s stain solution	1 l	**352622M**
May-Grunwald`s stain solution	500 ml	**352625P**
Methylene blue for microbiological staining Gurr® and reagent for molybdate	25 g	**340484B**
Neutral red for microscopical staining Gurr®	25 g	**340564A**
Neutral red for microscopical staining Gurr®	100 g	**340565B**
Nuclear fast red for microscopical staining Gurr®	25 g	**342094W**
Papanicolaou`s stain OG 6 Gurr®	1 l	**350405X**
Papanicolaou EA 50 Gurr® (new formulation)	1 l	**351695T**
Wright`s stain for microscopical staining Gurr®	25 g	**340804U**

IVD

Staining solutions and kits for histology and cytology

Dye solutions and staining kits for histology and cytology.

Description	Pk	Cat. No.
Alcian blue solution for microscopy	500 ml	**1.01647.0500**
Congo red staining kit for detection of amyloids	1	**1.01641.0001**
DAB buffer tablets	50 Tab.	**1.02924.0001**
Eosin Y 0,5% aqueous solution for microscopy	1 l	**1.09844.1000**
Hematoxylin solution modified acc. to Gill II	500 ml	**1.05175.0500**
Hematoxylin solution modified acc. to Gill II	2,5 l	**1.05175.2500**
Masson Goldner trichrome staining kit	1 KIT	**1.00485.0001**
Mayer's hemalum solution	500 ml	**1.09249.0500**
Mayer's hemalum solution	2,5 l	**1.09249.2500**
Methenamine silver plating kit method acc. to Gomorri	1	**1.00820.0001**
PAS staining kit	1	**1.01646.0001**
Periodic acid for analysis EMSURE®	25 g	**1.00524.0025**
Periodic acid for analysis EMSURE®	100 g	**1.00524.0100**
Silver plating kit acc. to von Kossa	1 SET	**1.00362.0001**
Warthin-Starry silver plating kit	1 SET	**1.02414.0001**
Weigert's iron hematoxylin kit	2	**1.15973.0002**

IVD

Staining solutions and kits for cytology

Cytological staining developed by Papanicolaou is still the standard technique for carcinoma and hormonal cycle diagnostics. Cytocolor® is a staining kit for gynaecological screening.

Description	Pk	Cat. No.
DNA staining kit according to Feulgen	1 Set	**1.07907.0001**
Hematoxylin solution modified acc. to Gill III	500 ml	**1.05174.0500**
Hematoxylin solution modified acc. to Gill III	1 l	**1.05174.1000**
Hematoxylin solution modified acc. to Gill III	2,5 l	**1.05174.2500**
Neo-Clear®	5 l	**1.09843.5000**
Papanicolaou's solution 1a, Harris' hematoxylin solution	500 ml	**1.09253.0500**
Papanicolaou's solution 1a, Harris' hematoxylin solution	1 l	**1.09253.1000**

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Description	Pk	Cat. No.
Papanicolaou's solution 1a, Harris' hematoxylin solution	2,5 l	**1.09253.2500**
Papanicolaou's solution 1b, hematoxylin solution S	500 ml	**1.09254.0500**
Papanicolaou's solution 1b, hematoxylin solution S	2,5 l	**1.09254.2500**
Papanicolaou's solution 2a, Orange G solution	500 ml	**1.06888.0500**
Papanicolaou's solution 2a, Orange G solution	2,5 l	**1.06888.2500**
Papanicolaou's solution 2b, Orange II solution	500 ml	**1.06887.0500**
Papanicolaou's solution 2b, Orange II solution	2,5 l	**1.06887.2500**
Papanicolaou's solution 3a polychromatic solution EA31	500 ml	**1.09271.0500**
Papanicolaou's solution 3a polychromatic solution EA31	2,5 l	**1.09271.2500**
Papanicolaou's solution 3b polychromatic solution EA50	500 ml	**1.09272.0500**
Papanicolaou's solution 3b polychromatic solution EA50	2,5 l	**1.09272.2500**
Papanicolaou's solution 3c polychromic solution EA 65 (staining effect; red)	100 ml	**1.09270.0100**
Papanicolaou's solution 3D polychromic solution EA 65 (staining effect; blue-grey)	100 ml	**1.09269.0100**
Papanicolaou's solution 3D polychromic solution EA 65 (staining effect; blue-grey)	2,5 l	**1.09269.2500**
Shorr dye solution	500 ml	**1.09275.0500**

IVD

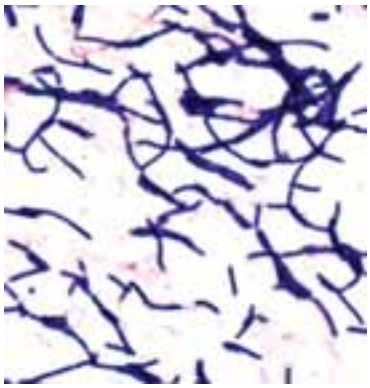
Staining solutions and kits for haematology

Hemacolor® is a staining kit consisting of 3 ready-to-use solutions. In addition to blood and bone marrow screenings, clinical cytology specimens can also be stained. The Leucognost® kits provide users with all necessary reagents and simple staining instructions for leukaemia differentiation.

Description	Pk	Cat. No.
Auto-Hemacolor® staining set for automatic blood smear staining	1 SET	**1.15213.0001**
Brilliant cresyl blue solution	100 ml	**1.01384.0100**
Buffer pH 6,40 (20 °C) tablets for preparing buffer solution according to Weise, for staining blood smears	100 Tab.	**1.11373.0100**
Buffer tablets pH 6,8	100 Tab.	**1.11374.0100**
Buffer tablets pH 7,2	100 Tab.	**1.09468.0100**
Giemsa's azur eosin methylene blue solution	100 ml	**1.09204.0100**
Giemsa's azur eosin methylene blue solution	500 ml	**1.09204.0500**
Giemsa's azur eosin methylene blue solution	1 l	**1.09204.1000**
Giemsa's azur eosin methylene blue solution	2,5 l	**1.09204.2500**
Giemsa's azur eosin methylene blue solution	25 l	**1.09204.9025**
Hemacolor® fixing solution 1	2,5 l	**1.11955.2500**
Hemacolor® fixing solution 2 colouring red	2,5 l	**1.11956.2500**
Hemacolor® fixing solution 3 colouring blue	2,5 l	**1.11957.2500**
Hemacolor® rapid staining set, 3x100 ml	1 SET	**1.11674.0001**
Hemacolor® rapid staining set, 3x500 ml	1 SET	**1.11661.0001**
Leishman's eosin methylene blue solution	500 ml	**1.05387.0500**
LEUCOGNOST® ALPA	1 KIT	**1.16300.0002**
LEUCOGNOST® fixing mixture	500 ml	**1.12327.0500**
LEUCOGNOST® PAS	1 KIT	**1.16302.0002**
LEUCOGNOST® POX	1 KIT	**1.16303.0002**
May-Grunwald eosin methylene blue solution	100 ml	**1.01424.0100**
May-Grunwald eosin methylene blue solution	500 ml	**1.01424.0500**
May-Grunwald eosin methylene blue solution	1 l	**1.01424.1000**
May-Grunwald eosin methylene blue solution	2,5 l	**1.01424.2500**
May-Grunwald eosin methylene blue solution	25 l	**1.01424.9025**
Schiff's reagent	500 ml	**1.09033.0500**
Turk`s solution	100 ml	**1.09277.0100**
Turk`s solution	500 ml	**1.09277.0500**
Wright's eosin methylene blue solution	100 ml	**1.01383.0100**
Wright's eosin methylene blue solution	500 ml	**1.01383.0500**
Wright's eosin methylene blue solution	2,5 l	**1.01383.2500**

IVD

Staining solutions and kits for bacteriology



Gram-color staining kit enables distinctions to be made between gram-positive and gram-negative bacteria. Tb-color is a staining kit for the microscopic examination of mycobacteria.

Description	Pk	Cat. No.
Acridine orange/zinc chloride (C.I.46005), for microscopy, Certistain®	25 g	**1.15931.0025**
Giemsa's azur eosin methylene blue solution	100 ml	**1.09204.0100**
Giemsa's azur eosin methylene blue solution	2,5 l	**1.09204.2500**
Giemsa's azur eosin methylene blue solution	25 l	**1.09204.9025**
Gram's crystal violet solution	500 ml	**1.09218.0500**
Gram's crystal violet solution	2,5 l	**1.09218.2500**
Gram's decolourisation solution	500 ml	**1.10218.0500**
Gram's decolourisation solution	2,5 l	**1.10218.2500**
Gram's safranine solution	500 ml	**1.09217.0500**
Gram's safranine solution	2,5 l	**1.09217.2500**
Gram-color modified (phenol-free)	1 Set	**1.01603.0001**
Gram-color staining kit, containing 500 ml each of crystal violet solution, Lugol's solution stabilised, Safranin solution and 2× 500 ml decolourisation solutions	1 KIT	**1.11885.0001**
Griess-Ilosvays reagent for the detection of nitrite	500 ml	**1.09023.0500**
Kovacs indole reagent	100 ml	**1.09293.0100**
Lactophenol blue solution for staining fungi	100 ml	**1.13741.0100**
Löffler's methylene blue solution for microscopy	100 ml	**1.01287.0100**
Löffler's methylene blue solution for microscopy	500 ml	**1.01287.0500**
Löffler's methylene blue solution for microscopy	2,5 l	**1.01287.2500**
Lugol's solution	1 l	**1.09261.1000**
Lugol's solution	2,5 l	**1.09261.2500**
Lugol's solution, stabilised	1 l	**1.00567.1000**
Tb-color carbol fuchsin solution (cold staining)	500 ml	**1.08512.0500**
Tb-color carbol fuchsin solution (cold staining)	2,5 l	**1.08512.2500**
Tb-color malachite green (oxalate) solution (cold staining)	500 ml	**1.10630.0500**
Tb-color staining kit for the microscopic investigation of mycobacteria (cold staining)	1 Kit	**1.16450.0001**
Tb-color staining kit for the microscopic investigation of mycobacteria (hot staining)	1	**1.00497.0001**
Tb fluor phenol-free	1 Kit	**1.01597.0001**
Tb-fluor staining kit for fluorescence-microscopic detection of acid fast bacteria	1 Kit	**1.09093.0001**
Ziehl-Neelsen carbol-fuchsin solution	100 ml	**1.09215.0100**
Ziehl-Neelsen carbol-fuchsin solution	500 ml	**1.09215.0500**
Ziehl-Neelsen carbol-fuchsin solution	2,5 l	**1.09215.2500**

IVD

Stains and dyes for microscopy

Certistain® dyes for microscopy are tested for their chemical composition and in particular for their functional use in accordance with strict specifications.

- The dyes ensure consistent staining results.

Description	Pk	Cat. No.
Acridine orange/zinc chloride (C.I.46005), for microscopy, Certistain®	25 g	**1.15931.0025**
Alcian blue 8GX (C.I. 74240) for microscopy, Certistain®	10 g	**1.05234.0010**
Amido black 10 B (C.I. 20470)	25 g	**1.01167.0025**
Amido black 10 B (C.I. 20470)	100 g	**1.01167.0100**
Auramine (C.I. 41000)	50 g	**1.01301.0050**
Azur II (C.I. 52010/52015)	10 g	**1.09211.0010**
Brilliant cresyl blue zinc chloride double salt, Certistain®	25 g	**1.01368.0025**
Brilliant green (hydrogen sulphate) (C.I. 42040) for microscopy, Certistain®	25 g	**1.01374.0025**
Calcein indicator for metal determination	5 g	**1.02315.0005**
Carmine, calcium aluminium lacquer with carminic acid (C.I. 75470) for microscopy, Certistain®	5 g	**1.15933.0005**
Carmine, calcium aluminium lacquer with carminic acid (C.I. 75470) for microscopy, Certistain®	25 g	**1.15933.0025**
Carminic acid (C.I. 75470)	5 g	**1.00211.0005**

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Description	Pk	Cat. No.
Cresyl violet for microscopy, Certistain®	25 g	**1.05235.0025**
Crystal violet (C.I. 42555) for microscopy, Certistain®	25 g	**1.15940.0025**
Crystal violet (C.I. 42555) for microscopy, Certistain®	100 g	**1.15940.0100**
Eosin B (blue) (C.I. 45400) for microscopy, Certistain®	25 g	**1.15934.0025**
Eosin B (blue) (C.I. 45400) for microscopy, Certistain®	100 g	**1.15934.0100**
Eosin Y (yellow) (C.I. 45380) for microscopy, Certistain®	25 g	**1.15935.0025**
Eosin Y (yellow) (C.I. 45380) for microscopy, Certistain®	100 g	**1.15935.0100**
Erythrosine B (C.I. 45430) for microscopy, Certistain®	10 g	**1.15936.0010**
Erythrosine B (C.I. 45430) for microscopy, Certistain®	25 g	**1.15936.0025**
Ethidium bromide, 1% solution in water	30 ml	**1.11608.0030**
Fast green FCF (C.I. 42053) for microscopy, Certistain®	25 g	**1.04022.0025**
Fluorescein-5-Isothiocyanate	250 mg	**1.24546.0250**
Fuchsin (C.I. 42510) for microscopy, Certistain®	100 g	**1.15937.0100**
Giemsa's azur eosin methylene blue	25 g	**1.09203.0025**
Giemsa's azur eosin methylene blue	100 g	**1.09203.0100**
Hematein (C.I. 75290)	25 g	**1.11487.0025**
Hematoxylin (C.I. 75290) Cryst.	25 g	**1.04302.0025**
Hematoxylin (C.I. 75290) Cryst.	100 g	**1.04302.0100**
Hematoxylin (C.I.75290) for microscopy, Certistain®	25 g	**1.15938.0025**
Hematoxylin (C.I.75290) for microscopy, Certistain®	100 g	**1.15938.0100**
Iodine	100 g	**1.04761.0100**
Iodine	500 g	**1.04761.0500**
Leishman's eosin methylene blue	10 g	**1.01350.0010**
Light green SF (C.I. 42095) for microscopy, Certistain®	25 g	**1.15941.0025**
Light green SF (C.I. 42095) for microscopy, Certistan®	100 g	**1.15941.0100**
Malachite green oxalate (C.I. 42000)	25 g	**1.01398.0025**
Malachite green oxalate (C.I. 42000)	100 g	**1.01398.0100**
Malachite green oxalate (C.I. 42000)	1 kg	**1.01398.1000**
Malachite green oxalate (C.I. 42000) for microscopy, Certistain®	25 g	**1.15942.0025**
Malachite green oxalate (C.I. 42000) for microscopy, Certistain®	100 g	**1.15942.0100**
Malachite green oxalate (C.I. 42000) for microscopy, Certistain®	1 kg	**1.15942.1000**
May-Gruenwald eosin methylene blue	25 g	**1.01352.0025**
May-Gruenwald eosin methylene blue	100 g	**1.01352.0100**
Methyl blue (C.I. 42780)	50 g	**1.16316.0050**
Methylene blue (C.I. 52015) for microscopy, Certistain®	25 g	**1.15943.0025**
Methylene blue (C.I. 52015) for microscopy, Certistain®	100 g	**1.15943.0100**
Methyl green (C.I. 42590) for microscopy, Certistain®	25 g	**1.15944.0025**
Neocarmine W Fesago	1 l	**1.06732.1000**
Neutral red (C.I. 50040) for microscopy, Certistain®	25 g	**1.01376.0025**
New fuchsin (C.I. 42520) for microscopy, Certistain®	100 g	**1.05226.0100**
Nigrosin (C.I. 50420) for microscopy, Certistain®	25 g	**1.15924.0025**
Nile blue (hydrogen sulphate) (C.I. 51180) for microscopy, Certistain®	25 g	**1.15946.0025**
Nitro blue tetrazolium chloride (NBT)	500 mg	**1.24823.0500**
Nuclear fast red (C.I. 60760) for microscopy, Certistain®	25 g	**1.15939.0025**
Oil red O (C.I. 26125) for microscopy, Certistain®	25 g	**1.05230.0025**
Orange G (C.I. 16230) for microscopy, Certistain®	25 g	**1.15925.0025**
Orcein for microscopy, Certistain®	5 g	**1.07100.0005**
Orcein for microscopy, Certistain®	25 g	**1.07100.0025**
Pararosaniline (chloride) (C.I. 42500) for microscopy, Certistain®	25 g	**1.07509.0025**
Pararosaniline (chloride) (C.I. 42500) for microscopy, Certistain®	100 g	**1.07509.0100**
Phloxin B (C.I. 45410) for microscopy, Certistain®	25 g	**1.15926.0025**
Ponceau S (C.I. 27195) for microscopy, Certistain®	25 g	**1.15927.0025**
Potassium iodide, GR ISO	250 g	**1.05043.0250**
Potassium iodide, GR ISO	500 g	**1.05043.0500**
Potassium iodide, GR ISO	1 kg	**1.05043.1000**
Pyronin G (C.I. 45005) for microscopy, Certistain®	25 g	**1.07518.0025**
Resorcinol GR for analysis	100 g	**1.07593.0100**
Resorcinol GR for analysis	250 g	**1.07593.0250**
Rhodamine B (C.I. 45170)	25 g	**1.07599.0025**
Rhodamine B (C.I. 45170)	100 g	**1.07599.0100**
Safranin O (C.I. 50240) for microscopy, Certistain®	25 g	**1.15948.0025**
Tannin	1 kg	**1.00773.1000**
Tetrazolium blue	5 g	**1.08103.0005**
Thionine (Acetate) (C.I. 52000) for microscopy, Certistain®	25 g	**1.15929.0025**
Thymol blue indicator ACS	25 g	**1.08176.0025**
Toluidine blue 0 (C.I.52040) for microscopy, Certistain®	25 g	**1.15930.0025**
Trypanblue (C.I. 23850)	25 g	**1.11732.0025**
Wright's eosin methylene blue	25 g	**1.09278.0025**
Xylene cyanol (C.I. 42135)	5 g	**1.10590.0005**

IVD

Embedding and mounting media

Paramat is a polymer-enriched paraffin of the highest purity and available with or without added dimethylsulphoxide (DMSO). Dimethylsulphoxide incorporated in the embedding agent leads to rapid infiltration of the specimen and guarantees total tissue penetration, thus considerably reducing embedding times. Residual moisture in the tissue and traces of intermedium are dispelled. The pastille shape makes for easy handling. Paramat extra (with DMSO) has a preservation effect.

Description	Pk	Cat. No.
Mollifex®, softening agent	500 ml	**360584X**
Paraffin wax, pastillated Gurr®, congealing point about 56 °C	10 kg	**361077E**
Paramat pastillated, Gurr® (paraffin wax blended with synthetic polymers) congealing point about 58 °C	2,5 kg	**361144V**
Paramat pastillated, Gurr® (paraffin wax blended with synthetic polymers) congealing point about 58 °C	10 kg	**361147B**
Paramat pastillated, Gurr® (paraffin wax blended with synthetic polymers) congealing point about 58 °C	25 kg	**361148C**
Paramat extra pastillated, Gurr® (paraffin wax blended with synthetic polymers and DMSO), congealing point about 58 °C	2,5 kg	**361334C**
Paramat extra pastillated, Gurr® (paraffin wax blended with synthetic polymers and DMSO), congealing point about 58 °C	10 kg	**361336E**
O.C.T. compound, mounting media for cryotomy	125 ml	**361603E**

IVD

Embedding and mounting media

The defined hardness and uniformity of the material to be cut are vital requirements in creating consistent quality in cutting. These requirements can be met using a range of suitable substances, such as paraffins, resins, gelatine and celloidin.

Description	Pk	Cat. No.
Aquatex®	50 ml	**1.08562.0050**
Canada balsam	25 ml	**1.01691.0025**
Canada balsam	100 ml	**1.01691.0100**
DPX (new) non-aqueous mounting media	500 ml	**1.00579.0500**
Entellan®, rapid for permanent specimens, 60-100 mPas	500 ml	**1.07960.0500**
Glycerol for fluorescence microscopy	250 ml	**1.04095.0250**
Merckoglas® for cytological screening; instead of cover glass	500 ml	**1.03973.0001**
Paraffin, solidification point 51 - 53 °C in pastille form Ph.Eur., BP, NF	25 kg	**1.07157.9025**
Paraffin, solidification point 51 - 58 °C in pastille form Ph. Eur., BP, NF	1 kg	**1.07157.1000**
Paraffin, solidification point 51 - 58 °C in pastille form Ph. Eur., BP, NF	2,5 kg	**1.07157.2500**
Paraffin 52-54, in pastille form Ph. Eur., BP, NF	1 kg	**1.07300.1000**
Paraffin 52-54, in pastille form Ph. Eur., BP, NF	20 kg	**1.07300.9020**
Paraffin 56-58, in pastille form Ph. Eur., BP, NF	1 kg	**1.07337.1000**
Paraffin 56-58, in pastille form Ph. Eur., BP, NF	2,5 kg	**1.07337.2500**
Paraffin 56-58, in pastille form Ph. Eur., BP, NF	20 kg	**1.07337.9020**
Paraffin 57-60, in pastille form Ph. Eur., BP, NF	1 kg	**1.07158.1000**
Paraffin 57-60, in pastille form Ph. Eur., BP, NF	25 kg	**1.07158.9025**

IVD

Paraffins, Histosec®

These paraffins with polymer additives are available with or without DMSO. The standardised quality achieved by careful choice of raw materials guarantees a full penetration of the tissue and significantly longer batch times in the histoprocessor. The high elasticity of the embedded tissue provides excellent single and multiple sections.

Description	Capacity	Pk	Cat. No.
Histosec® with DMSO	4 x 2,5 kg	10 kg	**1.11609.2504**
Histosec® with DMSO	25 kg	25 kg	**1.11609.9025**
Histosec® without DMSO	4 x 2,5 kg	10 kg	**1.15161.2504**
Histosec® without DMSO	25 kg	25 kg	**1.15161.9025**

Mounting medium

CRYO-M-BED is virtually impossible to remove whilst frozen. Viscous enough to prevent thawing caused by capillary action creep up the sides of the block. It holds on to the specimen and the chuck firmly to allow consistent even sectioning. CYO-M-BED becomes opaque upon freezing, facilitating block insertion - late enough to minimise thawing and early enough for it to be held securely.

- Chemically inert
- Sectioning frozen CRYO-M-BED will not dull knife
- Miscible with water - facilitating easy removal
- High viscosity, strong adhesion to tissue and holder, enables specimen orientation while liquid

Description	Pk	Cat. No.
Mounting media, CRYO-M-BED, bottle of 113 ml	1	**720-0094**

VWR CHEMICALS

Q Path® Coverquick mounting agents for microscopy

A range of mounting media for manual and automatic mounting of slides. The Q Path® Coverquick range consists of four different mounting media with different viscosities to meet all microscopy needs. The number after the name indicates increasing viscosity: Q Path® Coverquick 1000 has the lower viscosity (around 260 mPaS) and Q Path® Coverquick 4000 has the higher viscosity (around 920 mPaS).

- A complete range of mounting media for histology and cytology
- The entire range is suitable for manual mounting
- For automatic mounting the Q Path® Coverquick 3000 and 4000 are recommended
- Delivered in PET amber bottle, only Q Path® Coverquick 3000 is delivered in a aluminium bottle
- Dries quickly in 15 to 20 minutes

Description	Pk	Cat. No.
Q Path® Coverquick 1000, 260 mPaS	500 ml	**05547528**
Q Path® Coverquick 2000, 470 mPaS	500 ml	**05547530**
Q Path® Coverquick 2000, 470 mPaS	1 l	**05547531**
Q Path® Coverquick 3000, 610 mPaS	500 ml	**05547537**
Q Path® Coverquick 4000, 920 mPaS	500 ml	**05547539**
Q Path® Coverquick 4000, 920 mPaS	1 l	**05547540**

IVD

ISOSLIDE®

ISOSLIDE® control slides are designed for use with new as well as with existing products. ISOSLIDE® control slides help optimise and standardise staining results by allowing typical control material to be compared with a laboratory's own specimens. Typical material is prepared and sliced using standard procedures. One slide is already stained by the Merck staining procedure, while the other 24 are unstained paraffin sections. These slides can be stained using the laboratory's own method or according to the Merck protocol. For every pack of ISOSLIDE® control slides an insert sheet referring to the relevant Merck products will be available.

- Long shelf-life
- ISOSLIDE® control slides are prepared exclusively from animal material
- All slides in a box are from the same batch and are prepared from one block

Delivery information: ISOSLIDE® is sold in boxes of 25 slides

Description	Pk	Cat. No.
ISOSLIDE® reticulin control slides for the silver staining of reticular fibres	24 Tests	**1.00361.0001**
ISOSLIDE® iron control slides	24 Tests	**1.00380.0001**
ISOSLIDE® PAS	24 Tests	**1.00408.0001**
ISOSLIDE® Alcian blue	24 Tests	**1.00425.0001**
ISOSLIDE® Warthin-Starry	24 Tests	**1.02472.0001**
ISOSLIDE® Methenamine	25 Tests	**1.02473.0001**

IV Cannulae, Introcan®
B. Braun

Introcan® conventional IV catheter designed for single-handed insertion. Plastic catheter made of FEP. Push-off plate on catheter hub facilitates single-handed puncture procedures. Sharp backcut bevel for minimal puncture trauma.

- Four fully embedded x-ray contrast lines
- Hydrophobic blood stoppers and lock fitting
- Colour-coded sizes
- Latex free, PVC free

Meets ISO standard 10555-1/5 — same product properties as the Introcan Safety® (with PUR catheter) excluding the integrated, self-activating safety device for preventing needlestick injuries and the associated risk of infection.

Description	Gauge	Ø×L (mm)	Colour	Pk	Cat. No.
Introcan® W	G 14	2,10×50	Orange	50	**720-2512**
Introcan® W	G 16	1,70×50	Grey	50	**720-2511**
Introcan® W	G 18	1,30×45	Green	50	**720-2510**
Introcan® W	G 18	1,30×32	Green/White	50	**720-2545**
Introcan®	G 20	1,10×32	Pink	50	**720-2509**
Introcan®	G 22	0,90×25	Blue	50	**720-2508**
Introcan® W Certo with PU catheter	G 24	0,70×19	Yellow	50	**720-2506**
Introcan® W	G 24	0,70×19	Yellow	50	**720-2507**

IV Cannulae, Vasofix® Braunüle®
B. Braun

Vasofix® Braunüle® conventional IV catheter with injection port. IV catheter material available in Polyurethane and FEP for low-pain, gentle insertion of catheter. Integrated injection port: medication can be quickly administered without having to repuncture the area. Excellent puncture properties with atraumatic cannulae tip with triple facet bevel geometry.

- Four fully integrated x-ray contrast lines
- Hydrophobic blood stoppers
- Removable lock cones
- Colour-coded sizes
- Free of latex and PVC

Meets ISO standard 10555-1/5 — same product properties as the Vasofix® Safety (with FEP catheter) excluding the integrated, self-activating safety device for preventing needlestick injuries and the associated risk of infection.

Description	Gauge	Ø×L (mm)	Colour	Pk	Cat. No.
Vasofix® Braunüle®	G 22	0,90×25	Blue	50	**720-2546**
Vasofix® Braunüle®	G 20	1,10×33	Pink	50	**720-2547**
Vasofix® Braunüle®	G 18	1,30×45	Green	50	**720-2548**
Vasofix® Braunüle®	G 14	2,20×50	Orange	50	**720-2549**
Vasofix® Certo	G 22	0,90×25	Blue	50	**720-2550**
Vasofix® Certo	G 20	1,10×33	Pink	50	**720-2551**

Single use syringes for insulin injection, Omnican®
B. Braun

Latex free single use syringe with integrated cannula for subcutaneous injection of U-100 insulin (50 or 100 IU/ml).

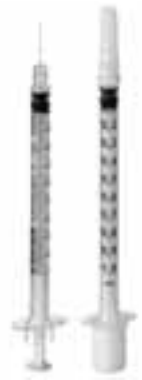
- Plunger stopper prevents the plunger from coming out of the syringe cylinder, ensuring medication is not wasted
- Large, easy to read scale enables reliable dosage, air bubbles can be easily seen through the clear body of the syringe
- Protective caps at the ends of the syringe ensures sterility
- All syringes are also available with a short 8 mm cannulae to avoid unintentional injection into muscle
- Precise, triple facet bevel and silicone coated cannulae means the puncture is barely noticeable

Packaging: 10×10 units in a polybag.

Description	Capacity (ml)	Length (mm)	Ø ext. (mm)	Pk	Cat. No.
Omnican® 50	0,5	8	0,3	100	**720-2554**
Omnican® 50	0,5	12	0,3	100	**720-2555**
Omnican® 100	1,0	8	0,3	100	**720-2556**
Omnican® 100	1,0	12	0,3	100	**720-2557**

Fine dosage syringes, Omnican®-F

B. Braun



PP/PS fine dosage syringes, 1 ml, ideal for tuberculin, heparin and allergy testing. Easy aspiration up to the maximum volume. The integrated needle (Ø 0,30 mm, length 12 mm, 30 G) ensures no dead space and no wasted medication. PVC-free.

- Good contrast, permanent black markings, with intervals of 0,01 ml
- Plunger gasket, made of synthetic rubber - extremely slow aspiration or injection, smoother plunger action with double sealing ring
- Safe plunger backstop
- Transparent protective cap for needle

Packaging: Dispenser box of 100 units.

Description	Capacity (ml)	Graduation (ml)	Pk	Cat. No.
Fine dosage syringe, packed per 10	1	0,01	100	**720-2559**
Fine dosage syringes, individually packaged	1	0,01	100	**720-2560**

Alcohol pads

B. Braun

Disposable alcohol pad for cleaning skin.

- Pre-saturated with 70% isopropyl alcohol
- Absorbent, lint-free, non-woven material

Description	Pk	Cat. No.
Alcohol pads	100	**720-2586**

Urinanalysis Kit, KOVA®

Complete urinalysis kit for up to 1000 determinations.

- 12 ml graduated non-sterile disposable centrifuge tubes manufactured of high-quality, break-resistant clear plastic and marked in 1 ml increments
- Disposable plastic transfer pipettes that feature a unique lock for one-step, contamination-free decanting, retaining 1 ml of urine after centrifugation
- Precision manufactured, 10-chambered disposable microscope slides made of optically clear plastic, the Glasstic® slide grid is in the focal plane of the specimen, allowing for use over a range of magnifications

Packaging: KOVA® System Super Pac contains 100 KOVA slides 10 (10 chambered), 1000 KOVA Petters (pipettes with bulge) and 1000 KOVA tubes.

Description	Pk	Cat. No.
System Super Pac Kit for 1000 determinations	1.000 SET	**720-2420**

Description	Pk	Cat. No.
Consumables		
Petter, multiple purpose disposable pipette	500	**720-2417**
Super tube, unbreakable, graduated	500	**720-2418**
Cap, flexible with flip tabs	500	**720-2419**

IVD

Test system for detection of inhibitors in urine, Urotest AB

Test system for the detection of antibacterial substances (inhibitors) in urine. This test is important for the conclusive diagnostic evaluation of a urinary infection. The reaction zone of the Urotest® AB test strip contains spores of *Bacillus subtilis* ATCC 6051 and buffered culture medium. Germinating spores exhibit metabolic activity. This reaction sequence can be used to test whether urine samples are free from inhibitors by observing the colour change. Dip the Urotest® AB test strip in the urine specimen, place in the special incubation bag and incubate for 5-24 hours. The test strip can be used both, as a rapid test (incubate for 5-7 hours) or for routine testing (incubate for up to 24 hours).

- Helpful for a reliable diagnostic evaluation
- Easy interpretation: Blue reaction zone means result is negative (urine specimen does not contain inhibitors); beige/white reaction zone means result is positive (urine specimen contains inhibitors)

Delivery information: 50 Urotest® AB test strips; 50 special incubation bags; 50 special adhesive strips for labelling.

Description	Pk	Cat. No.
Urotest® AB	50 Tests	**1.13194.0001**

IVD

Indicator strips, pH in urine for IVD use, MColorpHast™

Description	pH range	pH gradation	Pk	Cat. No.
Indicator strips, CE certified, MColorpHast™	2,0 - 9,0	0,5	100 Tests	**1.09584.1111**

Specula, vaginal

Disposable, crystal clear vaginal speculum made of polystyrene. The surface is smooth to reduce irritation.

- Available in three sizes: small, medium, large

Description	Pk	Cat. No.
Vaginal speculum, small	200	**720-1835**
Vaginal speculum, medium	200	**720-1836**
Vaginal speculum, large	200	**720-1837**

Safety containers, 'Bio Carrier'

These containers are suitable for the transport of biological samples. They can be taken to patient's homes for antitumoral drugs.

- Foldaway handle for easy stackability of several units
- Lugs to facilitate stacking and removable lid to facilitate cleaning
- "Biological Risk" logo conforming to current directives
- Container body etched with WHO emergency procedures in case of accidents during transport
- Shock-proof construction of lightweight material with special seal to guarantee air tightness in conformance with safety standards
- Tamper-proof lockable lid with padlock or seal
- Storage compartment accessible from lid, which can carry syringes, empty tubes, gloves, etc.

Description	Compartment size (mm)	Pk	Cat. No.
"Bio-Carrier" mini case	340×190×120	1	**720-1995**
"Bio-Carrier" case	394×216×229	1	**720-1988**
"Bio-Carrier" super case	394×216×305	1	**720-1989**

Safety containers, "Leak Proof"

These safety containers for the transport of biological samples and antiblastic drugs (up to 180 specimens) are equipped with holders for eutectic plates in order to reduce the inside temperature.

- Shock resistant and leakproof
- Absorbent holder
- PC hooks for a quick and safe closure
- Secure stackability
- Emergency procedures and safety measures indelibly printed

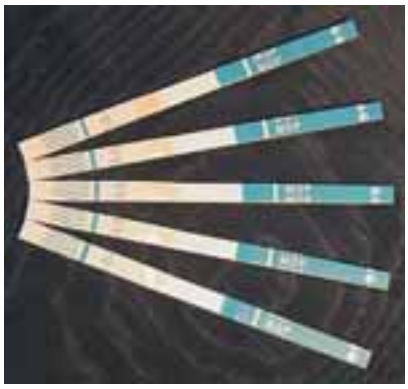
Conform to guidelines of the WHO/EMC/97.3 and to UNI EN 829 standards.

Description	W×D×H (mm)	Pk	Cat. No.
Small container	217×363×94 310×460×119	1	**720-1992**
Medium container	217×363×157 310×460×175	1	**720-1991**
Large container	217×363×235 310×460×255	1	**720-1990**

Description	Pk	Cat. No.
Accessories for "Leak Proof"		
Handles	2	**720-1993**

IVD

Test strips for drug testing in urine
SureScreen Diagnostics



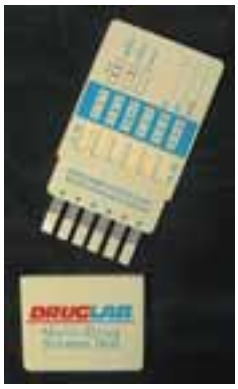
These test strips are the most efficient way of testing for specific drugs in urine.

- Results in less than five minutes
- Quick
- Reliable

Description	Pk	Cat. No.
Amphetamines test, 1000 ng/ml (AMP)	25	**720-0641**
Barbiturates test, 300 ng/ml (BAR)	25	**720-0650**
Benzodiazepines test, 300 ng/ml (BZO)	25	**720-0658**
Cannabis test, 50 ng/mg (THC)	25	**720-0665**
Cocaine test, 300 ng/ml (COC)	25	**720-0672**
Methadone test, 300 ng/ml (MTD)	25	**720-0738**
Opiates test, 2000 ng/ml (OPI)	25	**720-0749**
Opiates test, 300 ng/ml (MOP)	25	**720-0752**
Phencyclidine test, 25 ng/ml (PCP)	25	**720-0762**
Propyxyphene (PPX), 300 ng/ml	25	**720-1360**
Tricyclics test, 1000 ng/ml (TCA)	25	**720-0771**

IVD

Multipanel test strips for drug testing in urine
SureScreen Diagnostics



Panels available for testing up to 10 drugs. Ideal for pinpointing which drug is being abused. Specials also available depending on quantities, please contact your VWR office for further information.

- 99% accurate
- Clear results in 5 minutes
- Wide range of screening options

AMP: amphetamines

BAR: barbiturates

BZO: benzodiazepines

COC: cocaine

mAMP: methamphetamines

MDMA: ecstasy

MTD: methadone

OPI: opiates

PCP: phenylcyclidine

TCA: tricyclic antidepressants

THC: cannabis

Description	Pk	Cat. No.
4-Multipanel (COC/AMP/THC/OPI)	25	**720-0604**
5-Multipanel (COC/AMP/mAMP/THC/OPI)	25	**700-9815**
6-Multipanel (COC/AMP/mAMP/MTD/OPI/BZO)	25	**720-0633**
6-Multipanel (COC/AMP/mAMP/THC/OPI/BZO)	25	**720-0620**
6-Multipanel (COC/AMP/THC/MTD/OPI/BZO)	25	**720-0624**
6-Multipanel (COC/mAMP/THC/MDMA/OPI/PCP)	25	**720-0779**
10-Multipanel (AMP/BAR/BZO/COC/mAMP/MDMA/MTD/OPI/PCP/THC)	25	**720-0778**
10-Multipanel (AMP/BAR/BZO/COC/mAMP/MTD/MOP/PCP/TCA/THC)	25	**720-1028**

VWR CHEMICALS

Drug test kit

This kit provides a convenient means of screening suspect material for restricted drugs. The scheme and reagents were developed at the Laboratory of the Government Chemist. Each kit provides sufficient reagents for at least 200 tests.

Kit comprises:
20 (4 boxes of 5, 0,2 ml) ampoules of marquis reagent
1×10 ml cocaine reagent
1×10 ml barbiturate reagent
1×10 ml LSD reagent
1×20 ml cannabis reagent 1
1×10 ml cannabis reagent 2
1×5 g cannabis special solid reagent
1×20 g neutraliser
4 boxes of Whatman filter papers
1 microspatula
20 ampoule breakers
25 disposable spatulas
forceps
4 watch glasses
Instruction leaflet

Description	Pk	Cat. No.
BDH Drug test kit (cocaine, barbiturates, LSD, cannabis)	1	**321481P**
Replacement packs for drug test kit		
Barbiturate reagent	10 ml	**321652Q**
Cannabis reagent 1	20 ml	**321602G**
Cannabis reagent 2	10 ml	**321612Y**
Cannabis special solid reagent	5 g	**321622K**
Cocaine reagent	10 ml	**321642X**

ALL YOU NEED FOR CHEMICAL ANALYSIS

A great companion for chemists in any industry
- Sampling and sample preparation
- Spectroscopy, chromatography and physical measurement
- Waste and hazard management

Request your copy from your local VWR sales office or vwr.com

Purification systems, KingFisher™
Thermo Scientific

The KingFisher™ magnetic particle processors are designed to automate time consuming sample processing of nucleic acids, proteins or cells from virtually any source (blood, cell cultures, tissue lysates, soil, faeces, for example). The KingFisher™ family consists of instruments with different throughput and volume capacities to fulfil individual sample processing needs. Each system consists of an instrument, specially designed plastics, and software. The KingFisher™ systems offer rapid and reproducible purification of high quality DNA, RNA, proteins and cells for various types of downstream applications, including genomics and proteomics, drug discovery, forensics, biomarker discovery, quality control, and veterinary assays.

- High speed, fully automated purification
- Purification of any sample from any source
- Ready made and custom protocols
- Easy operation via instrument or external PC

KingFisher™ has the ability to purify small scale samples economically. The system can run up to 24 samples in 20 to 200 µl. All purification and processing steps are carried out in microstrips, with simple push button operation.

Model	KingFisher™
Capacity (samples/run)	24
Incubation	Ambient, no heating
Interfaces	Serial RS232C port
Internal software	Space for ~ 8 internal protocols
Keyboard/display	START/STOP/two cursor keys/LCD
Magnet rods	2×12 format
Magnetic particle size (µm)	~ >1
Plate types	Microstrips 1×8 wells, 8×12 grid format, 20 - 100 and 20 - 200 µl well volumes
Processing volume (µl)	20 - 200
Robot compatibility	No
Sample vessel (disposable)	8×12 strip plate (100 µl or 200 µl), capacity for 2 plates
Tip combs (disposable)	Special design, 1×12 format
Weight (kg)	10
W×D×H (mm)	290×290×310

Description	Pk	Cat. No.
KingFisher™	1	**735-0273**

Description	Pk	Cat. No.
Accessories and consumables for KingFisher™		
KingFisher™ tip comb	50	**733-3005**
KingFisher™ plate 100 µl	50	**733-3006**
KingFisher™ plate 200 µl	50	**733-3007**

Purification systems, KingFisher™ Duo
Thermo Scientific

The KingFisher™ magnetic particle processors are designed to automate time consuming sample processing of nucleic acids, proteins or cells from virtually any source (blood, cell cultures, tissue lysates, soil, faeces, for example). The KingFisher™ family consists of instruments with different throughput and volume capacities to fulfil individual sample processing needs. Each system consists of an instrument, specially designed plastics, and software. The KingFisher™ systems offer rapid and reproducible purification of high quality DNA, RNA, proteins and cells for various types of downstream applications, including genomics and proteomics, drug discovery, forensics, biomarker discovery, quality control, and veterinary assays.

- High speed, fully automated purification
- Purification of any sample from any source
- Ready made and custom protocols
- Easy operation via instrument or external PC

KingFisher™ Duo delivers advanced functionality in a compact, mid-throughput capacity instrument for isolation applications. The small footprint and functionality that includes traceability and data management make it ideal for research and routine laboratories. Two protocols can run sequentially without interruption, raising throughput to 24 samples per load. The Duo system also includes large volume processing up to 5 ml.

Model	KingFisher™ Duo
Capacity (samples/run)	6 - 24
Interfaces	USB
Internal software	Space for ~200 internal protocols
Magnet rods	12 or 6

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Magnetic particle size (µm)	~ >1
Particle collection efficiency	≥95%
Plate types	Microtiter 96 Deepwell plate or KingFisher Flex 24 Deepwell plate or Elution Strips special design, 1×12 format
Processing volume (µl)	50 - 1000 µl (96 DW plate, 12-pin magnet head) 30 - 130 µl (elution strip, 12-pin magnet head) 200 - 5000 µl (24 DW plate, 6-pin magnet head)
Weight (kg)	16
W×D×H (mm)	400×460×350

Description	Pk	Cat. No.
KingFisher™ Duo	1	**736-0682**

Description	Pk	Cat. No.
Accessories and consumables for KingFisher™ Duo		
KingFisher™ Duo 12-tip comb, for microtitre 96 deep well plate	50	**730-1410**
KingFisher™ Duo 6-tip combs, for KF Flex 24 deep well plate	48	**730-1411**
KingFisher™ Duo elution strip	40	**730-1412**
KingFisher™ Duo Combi pack for microtitre 96 deep well plate (tip combs, plates and elution strips for 96 samples)	1 KIT	**730-1413**

Purification systems, KingFisher™ Flex

Thermo Scientific

The KingFisher™ magnetic particle processors are designed to automate time consuming sample processing of nucleic acids, proteins or cells from virtually any source (blood, cell cultures, tissue lysates, soil, faeces, for example). The KingFisher™ family consists of instruments with different throughput and volume capacities to fulfil individual sample processing needs. Each system consists of an instrument, specially designed plastics, and software. The KingFisher™ systems offer rapid and reproducible purification of high quality DNA, RNA, proteins and cells for various types of downstream applications, including genomics and proteomics, drug discovery, forensics, biomarker discovery, quality control, and veterinary assays.

- High speed, fully automated purification
- Purification of any sample from any source
- Ready made and custom protocols
- Easy operation via instrument or external PC

KingFisher™ Flex offers highly versatile, automated magnetic particle processing for DNA/RNA, protein or cell purification from virtually any source. The system is able to handle a range of volumes from 20 to 5000 µl, depending on the magnet head, using either a 96- or 24-well plate format. Supplied with predefined protocols, KingFisher Flex allows the creation of custom-made protocols for special applications.

Model	KingFisher Flex with 96 PCR head	KingFisher Flex with 96 KF head	KingFisher Flex with 96 deep well head	KingFisher Flex with 24 deep well head
Capacity (samples/run)	96			24
Incubation	Heating block temperature from RT to +115 °C			
Interfaces	USB or serial RS232C port			
Internal software	Space for ~100 internal protocols			
Keyboard/display	START/STOP/PAUSE/OK, four arrow keys, two keys to rotate the turntable, colour LCD			
Magnetic particle size (µm)	~ >1			
Particle collection efficiency	>95%			
Plate types	20 - 100 µl	20 - 250 µl	50 - 1000 µl	200 - 5000 µl
Processing volume (µl)	20 - 1000			200 - 5000
Robot compatibility	Yes			
Tip combs (disposable)	Special design, 96 format			Special design, 24 format
Weight (kg)	28			
W×D×H (mm)	680×600×380			

Description	Pk	Cat. No.
KingFisher™ Flex with 96 PCR head	1	**731-0139**
KingFisher™ Flex with 96 KF head	1	**731-0140**
KingFisher™ Flex with 96 deep well head	1	**736-0683**
KingFisher™ Flex with 24 deep well head	1	**736-0684**

Description	Pk	Cat. No.
Accessories and consumables for KingFisher™ Flex		
KingFisher™ Flex 96 PCR head	1	**733-1975**
KingFisher™ Flex 96 PCR head and heating block	1	**733-1974**
KingFisher™ Flex 96 KF head	1	**733-1973**
KingFisher™ Flex 96 KF head and heating block	1	**733-1972**
KingFisher™ Flex 96 deep well head	1	**733-1971**
KingFisher™ Flex 96 deep well head and heating block	1	**733-1970**
KingFisher™ Flex 24 deep well head	1	**733-1969**
KingFisher™ Flex 24 deep well head and heating block	1	**733-1968**
KingFisher™ Flex 96 PCR heating block	1	**733-1967**
KingFisher™ Flex 96 KF heating block	1	**733-1966**
KingFisher™ Flex 96 deep well heating block	1	**733-1965**

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Description	Pk	Cat. No.
Accessories and consumables for KingFisher™ Flex		
KingFisher™ Flex 24 deep well heating block	1	**733-1964**
Microtiter® deep well 96 plate, V-bottom, PP	50	**733-3004**
Microtiter® deep well 96 plate, V-bottom, PP, sterile	50	**733-1960**
KingFisher™ Flex 24 deep well plate	50	**733-1959**
KingFisher™ Flex 24 deep well plate, sterile	50	**733-1958**
KingFisher™ Flex 96 tip comb for PCR magnets	80	**733-2364**
KingFisher™ Flex 96 tip comb for KF magnets	100	**733-3015**
KingFisher™ Flex 96 tip comb for deep well magnets	100	**735-0285**
KingFisher™ Flex 96 KF plate (200 µl)	48	**735-0286**
KingFisher™ Flex 24 deep well tip comb and plate, 50 pcs of each	1 KIT	**733-1957**

Standard plasmid isolation kits, E.Z.N.A.®

VWR - Omega Bio-Tek

Plasmid isolation kits for manual or automated plasmid isolation from mini to giga scale. These kits enable the isolation of plasmid DNA by means of HiBind® columns, Mag-Bead® beads, or isopropanol precipitation. The E.Z.N.A.® method allows for plasmid DNA isolation from bacteria, yeast, or M13 phage. Plasmid, BAC, PAC, YAC, P1, cosmid, and phage DNA can be isolated and used for restriction digestion, transfection, transformation, routine screening and other downstream applications.

V-spin columns feature an attached cap while Q-spin, Mini II, Midi and Maxi columns have a vacuum Luer tip for a leak-free connection to a vacuum manifold or Luer hub needle. These columns can be used for both centrifugation and vacuum protocols.

HP plasmid isolation kits isolate high purity plasmid from a wide range of bacterial host strains, especially those that contain elevated levels of endonuclease activity, in 30 minutes.

The X-Press plasmid isolation kit has a unique one-step lysing and binding procedure which can be completed in less than 7 minutes.

Description	Culture volume	Maximum yield	Pk	Cat. No.
E.Z.N.A.® X-Press Plasmid Mini Kit	1 - 3 ml	20 µg	50 Tests	**D6947-01**
E.Z.N.A.® X-Press Plasmid Mini Kit	1 - 3 ml	20 µg	200 Tests	**D6947-02**
E.Z.N.A.® Plasmid Mini Kit I (Q-Spin column)	1 - 5 ml	35 µg	50 Tests	**D6942-01**
E.Z.N.A.® Plasmid Mini Kit I (Q-Spin column)	1 - 5 ml	35 µg	200 Tests	**D6942-02**
E.Z.N.A.® Plasmid Mini Kit I (V-Spin column)	1 - 5 ml	30 µg	50 Tests	**D6943-01**
E.Z.N.A.® Plasmid Mini Kit I (V-Spin column)	1 - 5 ml	30 µg	200 Tests	**D6943-02**
E.Z.N.A.® Plasmid Mini Kit II (Q-Spin column)	3 - 15 ml	70 µg	50 Tests	**D6945-01**
E.Z.N.A.® Plasmid Mini Kit II (Q-Spin column)	3 - 15 ml	70 µg	200 Tests	**D6945-02**
E.Z.N.A.® Plasmid Midi Kit I	15 - 50 ml	200 µg	25 Tests	**D6904-03**
E.Z.N.A.® Plasmid Midi Kit I	15 - 50 ml	200 µg	100 Tests	**D6904-04**
E.Z.N.A.® Plasmid Maxi Kit I	50 - 200 ml	1 mg	5 Tests	**D6922-01**
E.Z.N.A.® Plasmid Maxi Kit I	50 - 200 ml	1 mg	20 Tests	**D6922-02**
E.Z.N.A.® Plasmid Maxi Kit I	50 - 200 ml	1 mg	100 Tests	**D6922-04**

E.Z.N.A.® and E-Z 96® Fastfilter® Plasmid Purification Kits

VWR - Omega Bio-Tek

E.Z.N.A.® Fastfilter® Plasmid kits rapidly purify plasmid DNA utilising lysate clearance filter syringes, whilst E-Z 96® Fastfilter Plasmid kits employ lysate clearance plates in a 96-well format. Fastfilter® kits allow midi- and maxi-scale plasmid isolation in less than 40 minutes.

Description	Culture volume	Maximum yield	Pk	Cat. No.
E-Z 96® Fastfilter® Plasmid Kit (4×96)	700 µl - 1 ml/well	12 µg/well	1 KIT	**D1097-01**
E-Z 96® Fastfilter® Plasmid Kit (20×96)	700 µl - 1 ml/well	12 µg/well	1 KIT	**D1097-02**
E.Z.N.A.® Fastfilter® Plasmid Midi Kit	15 - 50 ml	200 µg	25 Tests	**D6905-03**
E.Z.N.A.® Fastfilter® Plasmid Midi Kit	15 - 50 ml	200 µg	100 Tests	**D6905-04**
E.Z.N.A.® Fastfilter® Plasmid Maxi Kit	50 - 200 ml	1 mg	5 Tests	**D6924-01**
E.Z.N.A.® Fastfilter® Plasmid Maxi kit	50 - 200 ml	1 mg	25 Tests	**D6924-03**
E.Z.N.A.® Fastfilter® Plasmid Maxi kit	50 - 200 ml	1 mg	100 Tests	**D6924-04**

E.Z.N.A.® Endo-Free Plasmid Kits

VWR - Omega Bio-Tek

Plasmid isolated with traditional purification procedures normally contain high levels of endotoxins that can significantly interfere with transfection experiments downstream. The E.Z.N.A.® Endo-Free Plasmid kits integrate an efficient endotoxin removal step into the plasmid purification procedure to produce high quality transfection grade plasmid.

Description	Culture volume	Maximum yield	Pk	Cat. No.
E.Z.N.A.® Endo-Free Plasmid Mini Kit I	1 - 5 ml	35 µg	50 Tests	**D6948-01**
E.Z.N.A.® Endo-Free Plasmid Mini Kit I	1 - 5 ml	35 µg	200 Tests	**D6948-02**
E.Z.N.A.® Endo-Free Plasmid Midi Kit	15 - 50 ml	200 µg	10 Tests	**D6915-01**
E.Z.N.A.® Endo-Free Plasmid Midi Kit	15 - 50 ml	200 µg	25 Tests	**D6915-03**
E.Z.N.A.® Endo-Free Plasmid Midi Kit	15 - 50 ml	200 µg	100 Tests	**D6915-04**
E.Z.N.A.® Fastfilter® Endo-Free Plasmid Maxi Kit	50 - 200 ml	1 mg	6 Tests	**D6926-01**
E.Z.N.A.® Fastfilter® Endo-Free Plasmid Maxi kit	50 - 200 ml	1 mg	25 Tests	**D6926-03**
E.Z.N.A.® Fastfilter® Endo-Free Plasmid Maxi kit	50 - 200 ml	1 mg	100 Tests	**D6926-04**

Large construct DNA isolation, E.Z.N.A.® and E-Z 96® BAC/PAC DNA Kits

VWR - Omega Bio-Tek

The E-Z 96® Fastfilter BAC/PAC DNA Isolation Kit is designed for rapid high throughput purification of BACs, PACs, and P1s from small volume of *E. coli* bacterial cultures grown and processed in a 96-well plate format. Process may be performed by using either a centrifugation or full vacuum protocol. One 96-well plate can be processed manually within 60 minutes and two plates in less than 80 minutes.

The E.Z.N.A.® BAC/PAC DNA Maxi Kit combines the power of HiBind® technology with the time-tested consistency of alkaline-SDS lysis of bacterial cells to deliver high quality BAC/PAC DNA.

The E.Z.N.A.® BAC/PAC DNA Kit is designed for rapid high throughput purification of BACs, PACs, and P1s from small volume bacterial cultures. This kit can also be used for high copy plasmid isolation. Two protocols are provided in the handbook for convenience.

Description	Pk	Cat. No.
E-Z 96® Fastfilter® BAC/PAC DNA Kit (4×96)	1 KIT	**D1055-01**
E.Z.N.A.® BAC/PAC DNA Maxi Kit	5 Tests	**D2154-01**
E.Z.N.A.® BAC/PAC DNA Kit	50 T	**D2156-01**

E.Z.N.A.® and E-Z 96® M-13 Isolation Kits

VWR - Omega Bio-Tek

E.Z.N.A.® M13 DNA kits are designed to purify up to 10 µg of single-stranded DNA from up to 3 ml of phage supernatant. Yields of single-stranded DNA obtained using E.Z.N.A.® M13 DNA kits are around 3 to 10 µg and reproducible when the isolations are performed from the same culture. Kits are also available in E-Z 96® DNA plate format.

Description	Pk	Cat. No.
E.Z.N.A.® M-13 DNA Mini Kit	50 Tests	**D6900-01**
E-Z 96® M-13 DNA Kit (4×96)	1 KIT	**D1900-01**

FastPlasmid Mini Kit

5 PRIME

The FastPlasmid Mini Kit is a rapid, efficient kit for isolating high quality plasmid DNA. Plasmid purification can be performed in as little as 9 minutes. Up to 20 µg of high-copy plasmid DNA can be isolated from 1,5 ml of bacterial culture. Average yield with a high-copy vector and culture in LB medium is 10 µg.

- Time savings with fast procedure, taking as little as 9 minutes
- One-step lysis for simplified handling
- Yields reproducible, high quality, sequencing grade, plasmid DNA
- 1,5 ml of bacterial culture yields up to 20 µg high copy plasmid
- No special equipment required

Description	Pk	Cat. No.
FastPlasmid Mini Kit	100 Tests	**733-0175**
FastPlasmid Mini Kit	250 Tests	**733-0176**

E.Z.N.A.® MicroElute® Genomic DNA kit

VWR - Omega Bio-Tek

E.Z.N.A.® MicroElute® Genomic DNA kit provides a rapid and easy method for the isolation of genomic DNA from small sample volumes and sizes for consistent PCR and analytical test results. Using the reversible binding properties of a silica-based material, the speed of mini-column spin technology, and specifically formulated buffers, the system allows the purification of genomic DNA up to 60 kb. Samples are first lysed under denaturing conditions and then applied to the HiBind MicroElute® Column to bind DNA, while cellular debris, haemoglobin, and other proteins are effectively washed away. High quality DNA can be eluted with 10 to 15 µl sterile deionised water or Elution Buffer from the MicroElute® column.

- Purify genomic DNA from small sample volumes and small amount of cells
- High quality genomic DNA purification from variety of samples
- No phenol/chloroform extractions
- Purified DNA suitable for most downstream applications

Description	Average yield	Sample size	Pk	Cat. No.
E.Z.N.A.® MicroElute® Genomic DNA Kit	10 - 40 µg DNA	Up to 30 mg	50 Tests	**D3096-01**
E.Z.N.A.® MicroElute® Genomic DNA Kit	10 - 40 µg DNA	Up to 30 mg	200 Tests	**D3096-02**

E.Z.N.A.® Tissue DNA Kit

VWR - Omega Bio-Tek

The E.Z.N.A.® Tissue DNA Kit offers a simple, rapid, and cost effective method for the isolation of DNA from a wide variety of sample sources including fresh or frozen animal cells and tissues. After cell lysis, the DNA purification process can be completed in less than 30 minutes. Up to 30 mg of tissue at a time can be readily processed at a time using the simple E.Z.N.A.® Tissue DNA protocol. Single or multiple samples can be simultaneously processed with this spin-column based kit. There is no need for phenol/chloroform extractions, or time-consuming steps such as precipitation with isopropanol or ethanol. DNA purified using the E.Z.N.A.® Tissue DNA Kit is ready for most downstream applications such as PCR, Southern blot and restriction enzyme digestion.

- Isolation of DNA from either fresh or frozen samples
- Process 30 mg of tissue in under 20 minutes (after lysis)
- Purified DNA suitable for most downstream applications
- Optimised buffers guarantee pure DNA every time
- No organic extractions

Description	Average yield	Sample size	Pk	Cat. No.
E.Z.N.A.® Tissue DNA Kit (V-Spin)	10 - 40 µg DNA	30 mg	50 Tests	**D3396-01**
E.Z.N.A.® Tissue DNA Kit (V-Spin)	10 - 40 µg DNA	30 mg	200 Tests	**D3396-02**

E.Z.N.A.® Mag-Bind® Tissue DNA kit

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Mag-Bind® Tissue DNA kit allows rapid and reliable isolation of high quality genomic DNA from <30 mg tissue or <1×10^7 cultured cells. This kit allows single or multiple simultaneous processing of samples in under 1 hour. There is no need for phenol/chloroform extractions, time-consuming steps such as CsCl gradient ultracentrifugation, or precipitation with alcohols. DNA purified using the Mag-Bind® Tissue DNA kit is ready for applications such as PCR, Southern blotting, and restriction enzyme digestion. This kit can be used in conjunction with automated work stations.

- No phenol/chloroform extractions
- Complete removal of contaminants and inhibitors
- Consistent yields at unsurpassed quality
- High purity DNA can be used for PCR and Real-Time PCR

Description	Sample size	Pk	Cat. No.
E.Z.N.A.® Mag-Bind® Tissue DNA Kit	30 mg	200 T	**M6223-02**

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Mag-Bind® Tissue DNA 96 KF Kit
VWR - Omega Bio-Tek

The Mag-Bind® Tissue DNA 96 KF Kit allows rapid and reliable isolation of high quality genomic DNA from tissues or cultured cells on the KingFisher® magnetic particle processor. Up to 10 mg or 1×10^6 cells can be used in each well.

- Optimised protocols available
- No phenol/chloroform extractions
- Complete removal of contaminants and inhibitors
- Consistent yields at unsurpassed quality
- High purity DNA can be used for PCR and Real-Time PCR

Description	Pk	Cat. No.
E-Z 96® Mag-Bind® Tissue DNA KF Kit (20×96)	1 KIT	**M6329-02**

E-Z 96® Mag-Bind® Tissue DNA 96 kit
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The Mag-Bind® Tissue DNA 96 kit allows rapid and reliable isolation of high quality genomic DNA from tissues or cultured cells. Up to 20 mg or 1×10^6 cells can be used in each well. There is no need for phenol/chloroform extractions, time-consuming steps such as CsCl gradient ultracentrifugation, or precipitation with alcohols. DNA purified using the Mag-Bind® Tissue DNA 96 Kit is ready for applications such as PCR, Southern blotting, and restriction enzyme digestion. This kit can be used in conjunction with automated work stations.

- No phenol/chloroform extractions
- Complete removal of contaminants and inhibitors
- Consistent yields at unsurpassed quality
- High purity DNA can be used for PCR and Real-Time PCR

Description	Sample size	Pk	Cat. No.
E-Z 96® Mag-Bind® Tissue DNA Kit (4×96)	20 mg	1 KIT	**M6229-01**

E-Z 96® Tissue DNA Kit
VWR - Omega Bio-Tek

By adapting HiBind® technology with 96-well plates, the E-Z 96® Tissue DNA Kit provides a high throughput method to purify genomic DNA from whole blood, buccal swabs, mouse tail, rat tail, tissues and animal cells and tissues in a 96-well plate format. Purified DNA is suitable for most downstream applications such as PCR, restriction enzyme digestion, and hybridisation techniques.

- Isolation of DNA from 96 samples in less than 1 hour
- Reproducible DNA purification from variety of samples
- No phenol/chloroform extractions
- Purified DNA suitable for most downstream application

Description	Average yield	Sample size	Pk	Cat. No.
E-Z 96® Tissue DNA Kit (4×96)	10 - 40 µg DNA	30 mg	1 KIT	**D1196-01**
E-Z 96® Tissue DNA Kit (20×96)	10 - 40 µg DNA	30 mg	1 KIT	**D1196-02**

E.Z.N.A.® HP Tissue Kit
VWR - Omega Bio-Tek

The E.Z.N.A.® HP Tissue Maxi Kit is designed for the efficient recovery of genomic DNA from tissues rich in fat, polysaccharides, and fibre (brain, adipose, muscle, liver). In addition these kits can also be used to isolate DNA from molluscs, insects, arthropods, and other invertebrate tissues rich in mucopolysaccharides.
The E.Z.N.A.® HP Tissue DNA Maxi Kit is designed to isolate genomic DNA from up to 2 g of tissue; the E.Z.N.A.® HP Tissue DNA Midi Kit is designed to isolate genomic DNA from up to 500 mg of sample. Samples are homogenised and lysed in a high salt buffer containing CTAB, and then digested with Proteinase K. After the addition of chloroform, the homogenate is separated into aqueous and organic phases by centrifugation. The upper aqueous phase is mixed with BL Buffer to provide appropriate binding conditions. The sample is then loaded onto a HiBind DNA Maxi spin column, where the genomic DNA binds to the membrane and salt and other contaminants are efficiently washed away. High quality genomic DNA is then eluted with Elution Buffer or water. Purified DNA is suitable for most downstream applications such as endonuclease digestion, PCR, and hybridisation techniques.

- DNA isolation in 60 minutes following lysis
- Reproducible DNA purification from variety of sample sources
- Purified DNA suitable for any application
- Efficient purification of DNA from even specialised samples

Description	Average yield	Sample size	Pk	Cat. No.
E.Z.N.A.® HP Tissue DNA Midi Kit	400 - 600 µg	≥500 mg	25 Tests	**D5197-02**
E.Z.N.A.® HP Tissue DNA Maxi Kit	1,0 - 1,2 mg	Up to 2 g	10 Tests	**D5196-01**

E.Z.N.A.® Blood DNA Kit
VWR - Omega Bio-Tek

The E.Z.N.A.® Blood DNA Kit provides rapid total DNA isolation from up to 250 µl of fresh or frozen anticoagulated whole blood. The E.Z.N.A.® Blood DNA Kit can also be used for the preparation of genomic DNA from buffy coat, serum, plasma, bone marrow, lymphocytes, platelets, and body fluids. This kit allows for simultaneous processing of single or multiple samples in less than 30 minutes. Phenol/chloroform extractions, and time-consuming steps such as precipitation with isopropanol or ethanol have been eliminated. DNA purified with the E.Z.N.A.® Blood DNA method is ready for applications such as PCR, Southern blotting, or restriction enzyme digestion.

- Isolation of DNA in less than 30 minutes
- Optimised buffer system ensures reproducible results
- No organic extractions
- Purified DNA suitable for most downstream applications

Description	Sample size	Pk	Cat. No.
E.Z.N.A.® Blood DNA Mini Kit	10 - 250 µl	50 Tests	**D3392-01**
E.Z.N.A.® Blood DNA Mini Kit	10 - 250 µl	200 Tests	**D3392-02**

E.Z.N.A.® Blood DNA Midi Kit
VWR - Omega Bio-Tek

The E.Z.N.A.® Blood DNA Midi Kit is specially designed for large scale isolation of genomic DNA. The kit provides a rapid purification of genomic DNA from up to 10 ml blood samples. Possible sample sources include fresh and frozen whole blood treated with common anticoagulants such as citrate, EDTA and heparin. In addition plasma, serum, buffy coat, bone marrow, lymphocytes, platelets, and body fluid samples can also be used. Phenol/chloroform extractions, and time-consuming steps such as precipitation with isopropanol have been eliminated. DNA purified using the E.Z.N.A.® Blood DNA Midi method is free of contaminants and enzyme inhibitors making it suitable for most downstream applications such as PCR, Southern blotting and restriction enzyme digestion.

- Large scale isolation of high quality total DNA
- No organic extraction or alcohol precipitation
- Pure DNA free of contaminants and enzyme inhibitors
- Entire procedure completion takes less than 60 minutes
- Purified DNA is suitable for downstream applications

Description	Sample size	Pk	Cat. No.
E.Z.N.A.® Blood DNA Midi Prep Kit II	250 - 2000 µl	100 Tests	**D3494-04**

E-Z 96® Blood DNA Kit
VWR - Omega Bio-Tek

The E-Z 96® Blood DNA Kit is an integrated system that combines HiBind technology with 96-well plates. Up to 200 µl of healthy whole blood can be purified from each sample. The streamlined procedure and convenient high throughput format allows for the process of 96 whole blood samples in under 1 hour.

- Speed - purify 96 samples in less than 1 hour
- Reliability - optimised buffers guarantee pure DNA
- Safety - no organic extractions

Description	Average yield	Sample size	Pk	Cat. No.
E-Z 96® Blood DNA Kit (4×96)	3 - 6 µg	200 µl	1 KIT	**D1192-01**

E-Z 96® Mag-Bind® Blood DNA Kit
VWR - Omega Bio-Tek

The Mag-Bind® Blood DNA KF 96 Kit allows rapid and reliable isolation of high quality genomic DNA from 1 to 200 µl blood samples. The system is designed for use with the KingFisher® 96 magnetic particle processor, but can also be used with other automated purification protocols on other robotic workstations. The magnetic particles technology provides high quality DNA that is suitable for direct use in most downstream applications, such as amplification and enzymatic reactions.

- Optimised protocols available
- No phenol/chloroform extractions
- Complete removal of contaminants and inhibitors
- Consistent yields at unsurpassed quality
- High purity DNA can be used for PCR and Real-Time PCR

Description	Pk	Cat. No.
E-Z 96® Mag-Bind® Blood DNA 96 KF Kit (1×96)	1 KIT	**M6321-00**
E-Z 96® Mag-Bind® Blood DNA 96 KF Kit (4×96)	1 KIT	**M6321-01**

E-Z 96® Mag-Bind® Blood DNA Large Scale Isolation Kit

VWR - Omega Bio-Tek

The Mag-Bind® Blood DNA Large Scale Isolation Kit is designed for the purification of DNA from different volumes of fresh, frozen and anticoagulated whole blood treated with any common anticoagulant such as heparin, EDTA, or acid- citrate-dextrose. There is no need for phenol/chloroform extractions or time consuming steps such as precipitation with alcohols. The procedure completely removes contaminants and enzyme inhibitors that affect downstream applications such as PCR. This kit provides a rapid and easy method for the midi or large scale isolation of genomic DNA from whole blood samples.

- No phenol/chloroform extractions
- Protocol can be easily adapted to robotic workstations
- Complete removal of contaminants and inhibitors
- Consistent yields at unsurpassed quality
- High purity DNA can be used for most downstream applications

Description	Pk	Cat. No.
E-Z 96® Mag-Bind® Blood DNA Large Scale Kit, 50 ml	1 KIT	**M6213-01**

E-Z 96® Mag-Bind® Blood DNA 96 Kit

VWR - Omega Bio-Tek

The Mag-Bind® Blood DNA Mini 96 Kit is formatted for the purification of total DNA (genomic and mitochondrial) from 1 to 200 µl whole blood sample. Samples are first lysed in a high salt solution in the presence of a protease then bound to magnetic beads. The samples are then washed to remove contaminants and PCR inhibitors and eluted in a low salt buffer. The whole procedure takes only 50 minutes to complete and results in high quality DNA that can be used for enzymatic (PCR, qPCR) and hybridisation-based techniques.

- Can be adapted to most robotic liquid handling platforms and magnetic processors
- Isolates viral, mitochondrial and genomic DNA
- Safe - no phenol/chloroform extractions
- High purity DNA suitable for PCR, Real-Time PCR and microarrays

Description	Sample size	Pk	Cat. No.
E-Z 96® Mag-Bind® Blood DNA Mini 96 Kit (4×96)	200 µl	1 KIT	**M6211-01**

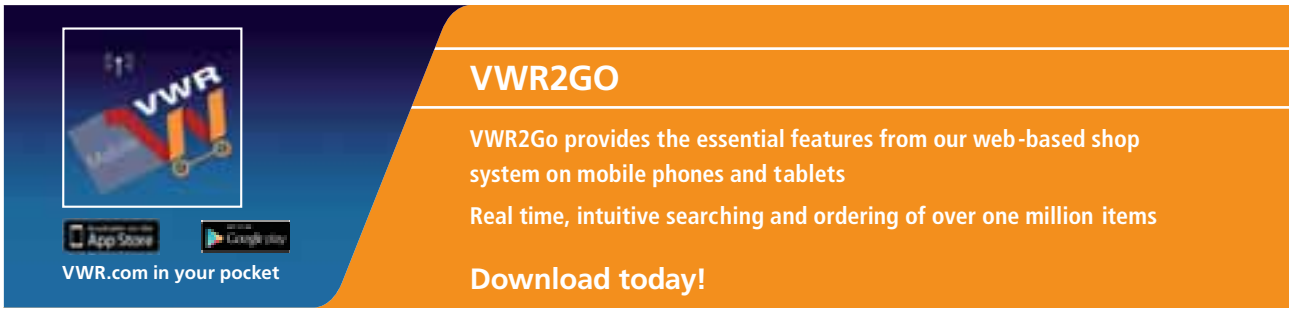
E.Z.N.A.® SQ Blood DNA Kit II

VWR - Omega Bio-Tek

The E.Z.N.A.® SQ Blood DNA Kit II is designed for the direct purification of high molecular weight genomic DNA from variable amounts of fresh and frozen whole blood treated with common anticoagulants such as citrate, EDTA and heparin. Buffy coat or cultured cell samples can also be extracted with this kit. The single tube procedure reduces plasticware consumption and potential cross-contamination. Single or multiple samples can be processed in less than 60 minutes, and can be easily scaled up and down according to the amount of starting material. Phenol/chloroform extractions, and time-consuming steps such as CsCl gradient ultracentrifugation are eliminated. DNA purified using the E.Z.N.A.® SQ Blood DNA Kit II is ideal for sensitive downstream applications.

- Simplified handling minimises cross-contamination
- Isopropanol precipitation - no phenol/chloroform extractions
- Versatility in amount of starting material from 0,1 to 20 ml whole blood
- High yields of pure DNA
- Purified DNA is ideal for use in sensitive downstream applications

Description	Sample size	Pk	Cat. No.
E.Z.N.A.® SQ Blood DNA Kit II	100 µl - 10 ml	50 ml	**D0714-50**
E.Z.N.A.® SQ Blood DNA Kit II	100 µl - 10 ml	250 ml	**D0714-250**



E.Z.N.A.® Plant DNA Kit
VWR - Omega Bio-Tek

The E.Z.N.A.® Plant DNA Kit is designed for the rapid and reliable isolation of high quality total cellular DNA from a wide variety of plant species. Up to 100 mg of wet samples or 30 mg dry samples can be processed in less than 60 minutes. This kit uses a proprietary method to eliminate polysaccharides, phenolic compounds, and enzyme inhibitors from plant sample. Purified DNA is suitable for PCR, restriction enzyme digestion, and hybridisation techniques. There are no organic extractions, thus reducing plastic waste and hands-on time.

- DNA isolation under 60 minutes
- Optimised buffer system ensures the reproducible results
- No organic extractions
- Purified DNA suitable for most downstream applications

Description	Average yield	Sample size	Pk	Cat. No.
E.Z.N.A.® Plant DNA Kit	8 - 50 µg	200 mg wet or 50 mg dry tissue	50 Tests	**D3485-01**
E.Z.N.A.® Plant DNA Kit	8 - 50 µg	200 mg wet or 50 mg dry tissue	200 Tests	**D3485-02**

E.Z.N.A.® SP Plant DNA Kit
VWR - Omega Bio-Tek

The E.Z.N.A.® SP Plant DNA Kit is specially designed for the rapid and reliable isolation of high quality total cellular DNA from a variety of plant species. Up to 100 mg of fresh samples or 30 mg of dry samples can be processed in less than 40 minutes. Purified DNA is suitable for most downstream applications including PCR, restriction digestions and hybridisation techniques.

- Rapid purification of ready to use DNA isolation in less 40 minutes
- Standardised method for reliable results from variety of samples
- No organic extractions
- Purified DNA suitable for most applications

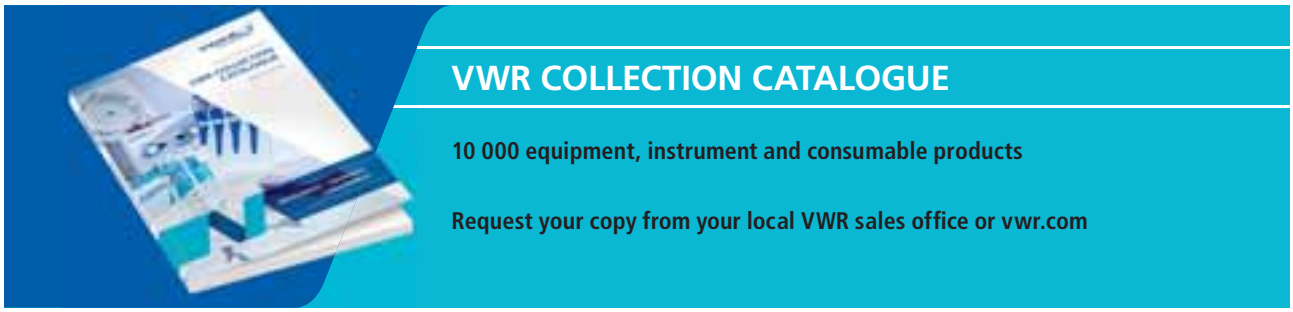
Description	Average yield	Sample size	Pk	Cat. No.
E.Z.N.A.® SP Plant DNA Kit	30 - 60 µg	100 mg of wet or 30 mg dry tissue	50 Tests	**D5511-01**
E.Z.N.A.® SP Plant DNA Kit	30 - 60 µg	100 mg of wet or 30 mg dry tissue	200 Tests	**D5511-02**

E-Z 96® Plant DNA Kit
VWR - Omega Bio-Tek

The E-Z 96® Plant DNA Kit allows rapid and reliable isolation of high quality total cellular DNA from a wide variety of plant species and tissues in a 96-well format. E-Z 96® Plant DNA Kits utilise a buffer system adapted from the SP Plant DNA system, which is suitable for a variety of plants, such as those with unusually high levels of phenolic compounds or polysaccharides (for example, cotton, pine and peanut samples). Up to 50 mg of wet tissue or 12 mg dry tissue can be processed in each well in less than 1 hour. The system combines the reversible nucleic acid-binding properties of the HiBind matrix with the speed and versatility of the E-Z 96® DNA plate to eliminate polysaccharides, phenolic compounds, and enzyme inhibitors from plant tissue lysates. Purified DNA is suitable for PCR, restriction digestion, and hybridisation techniques.

- DNA isolation of 96 samples in <90 minutes
- Optimised buffers guarantee pure DNA very time
- No organic extractions
- Purified DNA suitable for most downstream applications
- E-Z 96® plate is suitable for most robotic workstations

Description	Average yield	Sample size	Pk	Cat. No.
E-Z 96® Plant DNA Kit (1×96)	10 - 25 µg DNA from 10 mg dry tissue	30 mg of wet or 10 mg dry tissue	1 KIT	**D1086-01**
E-Z 96® Plant DNA Kit (4×96)	10 - 25 µg DNA from 10 mg dry tissue	30 mg of wet or 10 mg dry tissue	1 KIT	**D1086-02**



Mag-Bind® Plant DNA kit
VWR - Omega Bio-Tek

The Mag-Bind® Plant DNA kit allows rapid and reliable isolation of high quality genomic DNA from a wide variety of plant species and tissues. Using an appropriate magnetic separation stand, 50 mg of wet tissue sample (or 15 mg dry tissue) can be processed in less than one hour. The system combines E.Z.N.A.® buffer chemistry with the convenience of Mag-Bind® particles to eliminate polysaccharides, phenolic compounds, and enzyme inhibitors from plant tissue lysates. This kit is designed for manual low to medium throughput preparation of genomic, chloroplast, and mitochondrial DNA. Purified DNA is suitable for PCR, restriction digestion, and hybridisation applications. There are no organic extractions thereby reducing plastic waste and decreasing hands-on time to allow multiple samples to be processed in parallel.

- No phenol/chloroform extractions
- Protocol can be easily adapted on robotic workstations
- Complete removal of contaminants and inhibitors
- Consistent yields at unsurpassed quality
- DNA can be used for PCR and Real-Time PCR

Description	Pk	Cat. No.
E.Z.N.A.® Mag-Bind® Plant DNA Kit	50 T	**M2327-01**
E.Z.N.A.® Mag-Bind® Plant DNA Kit	200 T	**M2327-02**

Mag-Bind® Plant DNA Plus Kit
VWR - Omega Bio-Tek

The Mag-Bind® Plant DNA 96 Plus Kit allows rapid and reliable isolation of high-quality genomic DNA from a wide variety of difficult to lyse and high polysaccharide plant species and tissues. The system utilises a CTAB-based lysis buffer without the need for a chloroform or other organic solvent steps. The proprietary wash buffer systems eliminate polysaccharides, phenolic compounds, and enzyme inhibitors from plant tissue lysates. This kit is designed for manual or fully automated high throughput preparation of genomic, chloroplast, and mitochondrial DNA. The Mag-Bind® Plant DNA Plus Kit also provides greater flexibility than silica plate based systems as partial plates can be used and can be scaled up to a 24-well format with the appropriate magnetic stand. The streamlined protocol can be easily adapted on most robotic liquid handling platforms. Purified DNA is suitable for PCR, qPCR, restriction digestion, hybridisation applications, as well as more demanding applications, such as RAPD.

- Simple, rapid, and reliable procedure
- Reproducible yields of pure, ready to use DNA
- Adaptable in most robotic liquid handling platform

Description	Sample size	Pk	Cat. No.
Mag-Bind® Plant DNA Plus Kit (1×96)	50 mg of wet tissue or 10 mg dry tissue	1 KIT	**M1128-00**
Mag-Bind® Plant DNA Plus Kit (4×96)	50 mg of wet tissue or 10 mg dry tissue	1 KIT	**M1128-01**

Mag-Bind® Plant DNA 96 Kit
VWR - Omega Bio-Tek

The Mag-Bind® Plant DNA 96 Kit allows rapid and reliable isolation of high quality genomic DNA from a wide variety of plant species and tissues. Up to 50 mg of wet plant tissue (or 15 mg dry plant tissue) can be processed in less than one hour. The system combines E.Z.N.A.® buffer chemistry with the convenience of Mag-Bind® particles to eliminate polysaccharides, phenolic compounds, and enzyme inhibitors from plant tissue lysates. This kit is designed for manual or fully automated high throughput preparation of genomic, chloroplast, and mitochondrial DNA. The Mag-Bind® Plant DNA Kit also provides greater flexibility than silica plate-based systems as partial plates can be used and can be scaled up to a 24-well format with the appropriate magnetic stand. The streamlined protocol can be easily adapted on most robotic liquid handling platforms. Purified DNA is suitable for PCR, restriction digestion, hybridisation applications, and more demanding applications such as RAPD.

- Simple, rapid, and reliable procedure
- Reproducible yields of pure, ready to use DNA
- Adaptable in most robotic liquid handling platforms

Description	Pk	Cat. No.
EZ-96® Mag-Bind® Plant DNA Kit (2×96)	1 KIT	**M1027-01**
EZ-96® Mag-Bind® Plant DNA Kit (8×96)	1 KIT	**M1027-02**

Mag-Bind® Plant DNA KF 96 kit
VWR - Omega Bio-Tek

The Mag-Bind® Plant DNA KF 96 kit is designed for the purification of DNA from plant leaf, root and seed tissues in a 96-well format on the KingFisher® 96 or KingFisher® Flex platform. Up to 50 mg of wet plant tissue (or 15 mg dry plant tissue) can be processed in less than one hour. The system combines E.Z.N.A.® buffer chemistry with the convenience of Mag-Bind® particles to eliminate polysaccharides, phenolic compounds, and enzyme inhibitors from plant tissue lysates. This kit is designed for manual or fully automated high throughput preparation of genomic, chloroplast, and mitochondrial DNA. The Mag-Bind® Plant DNA Kit also provides greater flexibility than silica plate-based systems as partial plates can be used and can be scaled up to a 24-well format with the appropriate magnetic stand. The streamlined protocol can be easily adapted on most robotic liquid handling platforms. Purified DNA is suitable for PCR, restriction digestion, hybridisation applications, and more demanding applications such as RAPD.

- Reagent volumes designed for KingFisher® magnetic particle processors
- Simple, rapid, and reliable procedure
- Reproducible yields of pure, ready to use DNA
- Adaptable in most robotic liquid handling platform

Description	Pk	Cat. No.
E-Z 96® Mag-Bind® Plant DNA KF 96 Kit (2×96)	1 KIT	**M1127-01**
E-Z 96® Mag-Bind® Plant DNA KF 96 Kit (8×96)	1 KIT	**M1127-02**

E.Z.N.A.® Yeast DNA Kit
VWR - Omega Bio-Tek

The E.Z.N.A.® Yeast DNA Kit is comprised of a quick and efficient lysis procedure to isolate of high quality genomic, YAC, or plasmid DNA from yeast. There are no organic extractions, thus reducing plastic waste and hands-on time to allow for reliable isolation of total cellular DNA from a wide variety of yeast species. Purified DNA is suitable for PCR, restriction enzyme digestion, and hybridisation techniques to be processed in parallel.

- Reproducible DNA purification from variety of sample sources
- High yield - glass beads and enzymatic digestion for cell lysis

Description	Sample size	Pk	Cat. No.
E.Z.N.A.® Yeast DNA Kit	3 ml log phase culture	50 Tests	**D3370-01**

E.Z.N.A.® Bacterial DNA Kit
VWR - Omega Bio-Tek

The E.Z.N.A.® Bacterial DNA Kit allows the rapid and reliable isolation of high quality total cellular DNA from a wide variety of bacterial species. This kit uses optimised lysis condition and up to 1×10^9 bacterial cells can be processed for each column. There are no organic extractions, thus reducing plastic waste and hands on time to allow multiple samples to be processed in parallel. Bacterial cells are grown to log-phase and harvested. The cell wall is removed by lysozyme digestion and bead beating, followed by protease digestion. Following lysis, binding conditions are adjusted and the sample is applied to a HiBind DNA spin-column. Two rapid wash steps remove trace salts and protein contaminants, and DNA is finally eluted in water or Elution Buffer. Purified DNA can be directly used in downstream applications without the need for further purification.

- Suitable for most bacterial strains
- DNA isolation in less than 20 minutes (after lysis)
- Optimised buffers guarantee pure DNA
- No organic extractions
- Purified DNA suitable for most applications

Description	Average yield	Sample size	Pk	Cat. No.
E.Z.N.A.® Bacterial DNA Mini Kit	15 - 30 µg	3 ml log phase culture	50 Tests	**D3350-01**
E.Z.N.A.® Bacterial DNA Mini Kit	15 - 30 µg	3 ml log phase culture	200 Tests	**D3350-02**

E-Z 96® Mag-Bind® Bacterial DNA 96 Kit
VWR - Omega Bio-Tek

The E-Z 96® Mag-Bind® Bacterial DNA kit allows rapid and reliable isolation of high quality genomic DNA (gDNA) from a wide variety of bacterial species. Up to 0,5 ml gram positive or gram negative bacterial culture can be processed each time. The key to the system are the Mag-Bind® particles that avidly, but reversibly, bind DNA or RNA under certain optimal conditions allowing proteins and other contaminants to be removed. After bacterial cells are collected from culture or picked from an agar plate, the bacterial cell wall is removed by lysozyme digestion, followed by Proteinase K digestion. Following lysis, binding conditions are adjusted and the sample is mixed with Mag-Bind® particles to bind DNA. Three rapid wash steps remove trace salts and protein contaminants, and finally DNA is eluted in water or low ionic strength buffer. Purified DNA can be directly used in downstream applications without the need for further purification.

Description	Pk	Cat. No.
E-Z 96® Mag-Bind® Bacterial DNA 96 Kit (4×96)	1 KIT	**M2350-01**

E.Z.N.A.® Mag-Bind® Soil DNA Kit

VWR - Omega Bio-Tek

The E.Z.N.A.® Mag-Bind® Soil DNA kit provides a fast and easy method for isolation of genomic DNA from environmental samples containing high humic acid contents. Environmental samples are added to a bead beating tube for rapid and thorough homogenisation. After lysis, proteins and unsoluble particles are removed. The binding conditions are then adjusted and the Mag-Bind® particles are added to lysate to bind DNA. After two rapid washing steps to remove traces of contaminants, pure DNA is eluted with Elution Buffer or water. The purified DNA is ready to use in most downstream applications such as PCR, Southern blotting, SNP analysis. Purified DNA can be directly used in downstream applications without any further purification.

- Rapid isolation of high quality, ready to use genomic DNA
- Highly structurally intact and humic-free DNA
- Simple and efficient isolation of DNA from soil microbes
- Protocol can be easily adapted on robotic workstations

Description	Sample size	Pk	Cat. No.
E.N.Z.A.® Mag-Bind® Soil DNA Kit	1 g	50 Tests	**M5635-01**
E.N.Z.A.® Mag-Bind® Soil DNA Kit	1 g	200 Tests	**M5635-02**

E.Z.N.A.® Soil DNA Kit

VWR - Omega Bio-Tek

The E.Z.N.A.® Soil DNA Kit is formulated to isolate high purity cellular DNA from soil samples typically containing humic acid and inhibitors of PCR. This kit has been successfully used to isolate DNA from tough-to-lyse bacteria, fungi, and algae that inhabit a range of samples including clay, sandy, peaty, chalky, and loamy soil samples. Isolated DNA can be used for most downstream applications including PCR, Southern blotting, and SNP analysis.

- DNA isolation in 1 hour
- Optimised buffers guarantee pure DNA every time
- Purified DNA suitable for most downstream applications

Description	Sample size	Pk	Cat. No.
E.Z.N.A.® Soil DNA Mini Kit	1 g	50 Tests	**D5625-01**
E.Z.N.A.® Soil DNA Mini Kit	1 g	200 Tests	**D5625-02**

E.Z.N.A.® Stool DNA Kit

VWR - Omega Bio-Tek

The E.Z.N.A.® Stool DNA Kit allows rapid and reliable isolation of high quality total DNA from fresh and frozen stool samples. Up to 200 mg of stool samples can be processed in less than 60 minutes. The system combines the reversible nucleic acid-binding properties of HiBind matrix with the speed and versatility of spin column technology to eliminate humic acid, polysaccharides, phenolic compounds, and enzyme inhibitors from stool samples. Purified DNA is suitable for PCR, restriction digestion, and hybridisation techniques.

- High quality DNA in less than 1 hour
- Optimised buffers guarantee pure DNA every time
- Purified DNA suitable for most downstream applications
- No phenol/chloroform extractions

Description	Sample size	Pk	Cat. No.
E.Z.N.A.® Stool DNA Kit	200 mg	50 Tests	**D4015-01**
E.Z.N.A.® Stool DNA Kit	200 mg	200 Tests	**D4015-02**

Mag-Bind® Stool DNA Kit
VWR - Omega Bio-Tek

The Mag-Bind® Stool DNA Kit provides a fast and easy method for isolation of genomic DNA from stool samples containing high humic acid contents. Stool samples are added to a bead beating tube for rapid and thorough homogenisation. After lysis, proteins and insoluble particles are removed. Binding conditions are then adjusted and Mag-Bind® particles are added to bind DNA. After two rapid washing steps to remove traces of contaminants, pure DNA is eluted with Elution Buffer or water. The purified DNA is ready to use in most downstream applications such as PCR, Southern blotting and SNP analysis.

- Rapid isolation of high quality, ready to use genomic DNA
- Highly structurally intact and humic-free DNA
- Simple and efficient isolation of DNA from soil microbes
- Protocol can be easily adapted on robotic workstations

Description	Sample size	Pk	Cat. No.
Mag-Bind® Stool DNA Kit	200 mg	200 Tests	**M4015-02**

E.Z.N.A.® Water DNA Kit
VWR - Omega Bio-Tek

The E.Z.N.A.® Water DNA Kit is formulated to isolate high purity cellular DNA from water samples typically containing humic acid and inhibitors of PCR. This kit has been successfully used to isolate DNA from tough-to-lyse bacteria, fungi, and algae that inhabit a range of samples including tap water, lake, river and sewage samples. Isolated DNA can be used for most downstream applications including PCR, Southern blotting, SNP analysis.

Description	Pk	Cat. No.
E.Z.N.A.® Water DNA Kit	50 Tests	**D5525-01**
E.Z.N.A.® Water DNA Kit	200 Tests	**D5525-02**

E.Z.N.A.® and E-Z 96® Fungal DNA Kits
VWR - Omega Bio-Tek

The E.Z.N.A.® and E-Z 96® Fungal DNA Kits allow for the rapid and reliable isolation of high quality total cellular DNA from a wide variety of fungal species without the need for organic extraction. The E.Z.N.A.® SP Fungal DNA Kit incorporates a filtration and homogenisation column that can efficiently remove cell debris and improve sample handling following lysis. The E.Z.N.A.® High Performance (HP) DNA Kit is designed for efficient recovery of genomic DNA up to 60 kb in size from fresh and dried fungal tissue samples rich in polysaccharides or with lower DNA contents.

Description	Average yield	Sample size	Pk	Cat. No.
E.Z.N.A.® Fungal DNA Maxi Kit	1 - 2 mg	2,5 g wet or 300 mg dry tissue	20 Tests	**D3690-02**
E.Z.N.A.® HP Fungal DNA Kit	10 - 40 µg	100 mg wet or 30 mg dry tissue	50 Tests	**D3195-01**
E.Z.N.A.® Fungal DNA Mini Kit	10 - 40 µg	100 mg wet or 30 mg dry tissue	50 Tests	**D3390-01**
E.Z.N.A.® Fungal DNA Mini Kit	10 - 40 µg	100 mg wet or 30 mg dry tissue	200 T	**D3390-02**
E.Z.N.A.® SP Fungal DNA Mini Kit	10 - 20 µg	100 mg wet or 30 mg dry tissue	50 Tests	**D5542-01**
E.Z.N.A.® SP Fungal DNA Mini Kit	10 - 20 µg	100 mg wet or 30 mg dry tissue	200 Tests	**D5542-02**
E-Z 96® Fungal DNA Kit (2×96)		100 mg wet or 30 mg dry tissue	1 KIT	**D1090-01**

ArchivePure™ DNA Cell/Tissue and Tissue Kits
5 PRIME

ArchivePure™ DNA Cell/Tissue and Tissue Kits are designed for genomic DNA isolation from cells and fresh, frozen, fixed or paraffin-embedded tissue samples.

- DNA purification from a wide variety of sample types including cells, body fluid, Gram-negative bacteria and tissue samples with a single kit
- Pre-mixed and ready to use reagents
- Isolates high molecular weight DNA with exceptional purity
- Fast procedure

Delivery information: All kits contains cell lysis solution, protein precipitation solution, DNA hydration solution, and RNase A solution (4 mg/ml). Tissue kits also contain proteinase K solution (20 mg/ml).

Description	Pk	Cat. No.
ArchivePure™ DNA Cell/Tissue Kit, for 1g tissue or 2×10^8 cells	1 KIT	**733-1018**
ArchivePure™ DNA Cell/Tissue Kit, for 4 g tissue or 8×10^8 cells	1 KIT	**733-1019**
ArchivePure™ DNA Tissue Kit, for 100 mg tissue	1 KIT	**733-1021**
ArchivePure™ DNA Tissue Kit, for 4 g tissue	1 KIT	**733-1022**

ArchivePure™ DNA Blood Kit
5 PRIME

ArchivePure™ Blood Kit is optimised for genomic DNA isolation from 150 µl to 10 ml of fresh or frozen whole blood, bone marrow, packed cells, or buffy coat samples.

- DNA purification from a wide variety of sample types
- Protocols are scalable
- Premixed and ready to use reagents
- Isolates high molecular weight DNA, from 100 to 200 kb
- Fast procedure

Description	Pk	Cat. No.
ArchivePure™ DNA Blood Kit, for 30 ml blood	1 KIT	**733-1014**
ArchivePure™ DNA Blood Kit, for 120 ml blood	1 KIT	**733-1015**
ArchivePure™ DNA Blood Kit, for 1000 ml blood	1 KIT	**733-1016**
ArchivePure™ DNA Blood base Kit (without RNase A solution), for 1000 ml blood	1 KIT	**733-2057**

Ready PCR DNA Column Kit
5 PRIME

The Ready PCR DNA Column Kit provides the components and procedures necessary for purifying genomic, mitochondrial, and viral DNA from whole blood, bone marrow, buffy coat, body fluids, cultured cells, cells in suspension (including tissue homogenates), and Gram-negative bacteria. Each 200 µl column is designed to purify to 60 µg of DNA from up to 1×10^6 cells per sample.

- Consistently produces high yields of PCR-ready DNA for screening
- Simple, two solution system
- Quick and easy protocol
- Yields up to 60 µg per sample

Description	Pk	Cat. No.
Ready PCR DNA Column Kit	50 Tests	**733-1050**
Ready PCR DNA Column Kit	300 Tests	**733-1051**

illustra™ GenomiPhi™ V2 DNA Amplification Kits
GE Healthcare

illustra™ GenomiPhi™ V2 DNA Amplification Kit, part of the Phi29 DNA polymerase family, is for mini-scale genomic DNA preparation. The protocol is simple. A typical DNA yield of 4 to 7 µg DNA can be achieved in less than two hours with limited hands-on time. The average product length is >10 kb. The starting material for GenomiPhi reactions can be purified DNA from any commercial kit or homebrew method, or non purified cell lysate.

- Quick mini-scale genomic DNA preparation: 4 to 7 µg in <2 hours
- One simple protocol for all different types of source material
- Representative amplification of the whole genome
- High quality DNA for restriction enzyme digestion, hybridisation, cloning, array CGH high throughput genotyping, and DNA archival

Description	Pk	Cat. No.
illustra™ GenomiPhi™ V2 DNA Amplification Kit, 25 reactions	1 KIT	**25-6600-30**
illustra™ GenomiPhi™ V2 DNA Amplification Kit, 100 reactions	1 KIT	**25-6600-31**
illustra™ GenomiPhi™ V2 DNA Amplification Kit, 500 reactions	1 KIT	**25-6600-32**

illustra™ triplePrep Kit
GE Healthcare

The illustra™ triplePrep Kit is designed for the rapid isolation and purification of high yield genomic DNA (gDNA), total RNA, and total denatured proteins from undivided animal tissues and mammalian cells. The streamlined workflow reduces the overall number of steps, enabling the preparation of all three analytes in less than 1 hour.

- Isolate gDNA, total RNA, and total denatured proteins from undivided tissue and cell samples in less than 1 hour
- Directly correlate DNA, RNA, and protein data from the same sample
- Flexible workflow allows easy isolation of any two or all three analytes

Sample type	Rat liver	HeLa cells
Sample input amount	1 - 20 mg	$0{,}3 - 5\times10^6$
Genomic DNA yield	1 - 3 µg (per mg tissue)	4 - 12 µg (per 1×10^6 cells)
Total RNA yield	3 - 7 µg (per mg tissue)	10 - 15 µg (per 1×10^6 cells)
Protein yield	80 - 160 µg (per mg tissue)	100 - 200 µg (per 1×10^6 cells)

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Genomic DNA purity (A260/A280)	≥1,7	≥1,7
Genomic DNA size (kb)	≥15	≥15
Total RNA purity (A260/A280)	≥1,9	≥1,9
Total RNA quality (RIN)	8 - 10	8 - 10
Total RNA quality (28s:18s)	1,5 - 2,5	1,5 - 2,5
Time/preparation (excluding lysis)	45 - 60 min	45 - 60 min

Description	Pk	Cat. No.
illustra™ triplePrep Kit, 50 preps	50 Tests	**28-9425-44**

Yields and purities of gDNA, total RNA, and total denatured proteins can vary with user and depend on the nature and condition of the input sample.

E.Z.N.A® Formalin-Fixed, Paraffin-Embedded (FFPE) Tissue DNA/RNA Kits
VWR - Omega Bio-Tek

Selected protease digestion releases microgram amounts of DNA and RNA from FFPE samples. The purified nucleic acids, although highly fragmented, are suitable for a variety of downstream genomic and gene expression analyses. E.Z.N.A® spin column-based kits are ideal for low throughput applications while Mag-Bind® magnetic beads-based kits are designed specifically for high throughput users with automation capability.

- Impressive yield in as little as 40 minutes
- Standard protocol requires no xylene extraction
- Magnetic beads-based kits fully compatible with most automation platforms

Description	Pk	Cat. No.
E.Z.N.A.® FFPE DNA Isolation Kit	50 Tests	**D3399-01**
E.Z.N.A.® FFPE RNA Isolation Kit	50 Tests	**R6954-01**
E.Z.N.A.® FFPE RNA Isolation Kit	200 Tests	**R6954-02**
Mag-Bind® FFPE RNA 96 Kit (4×96)	1 KIT	**M2551-01**
Mag-Bind® FFPE RNA 96 Kit (20×96)	1 KIT	**M2551-02**
Mag-Bind® FFPE RNA 96 KF Kit for KingFisher® (4×96)	1 KIT	**M6953-01**

RNA isolation kits, E.Z.N.A.® and E-Z 96®
VWR - Omega Bio-Tek

Kits for the isolation of total RNA or mRNA using manual or automated purification systems. Isolated RNA can be used for Northern blotting, RT-PCR, nuclease protection assays, *in vitro* translation, and microarray analysis. Miniprep kits that use HiBind® spin columns use V-spin columns which feature an attached cap and a standard Luer tip at the bottom for easy, leak-free connection to a vacuum manifold or Luer hub needle. Midi and maxi columns feature a standard vacuum Luer for faster processing. These columns can be used for both centrifugation and vacuum protocols. SQ kits use a solution-based extraction method allowing for varying sample size and high sample throughput extractions.

The RNA-Solv® reagent is a one-reagent system for the isolation of total RNA from cells and tissues.

Description	Average yield	Elution volume	Sample size	Pk	Cat. No.
E-Z 96® HP Total RNA Kit I (4×96)	5 - 20 µg	40 - 70 µl	1×10^6 cells or 10 mg tissue	1 KIT	**R6813-01**
Mag-Bind® Total RNA 96 Kit (4×96)	10 - 50 µg	30 - 100 µl	1×10^6 cells or 15 mg tissue	1 KIT	**M6731-01**
Mag-Bind® Total RNA 96 Kit (12×96)	10 - 50 µg	30 - 100 µl	1×10^6 cells or 15 mg tissue	1 KIT	**M6731-02**
E-Z 96® Total RNA Kit I (1×96)	5 - 20 µg	40 - 70 µl	5×10^6 cells or 10 mg tissue	1 KIT	**R1034-00**
E-Z 96® Total RNA Kit I (4×96)	5 - 20 µg	40 - 70 µl	5×10^6 cells or 10 mg tissue	1 KIT	**R1034-01**
E-Z 96® Total RNA Kit I (12×96)	5 - 20 µg	40 - 70 µl	5×10^6 cells or 10 mg tissue	1 KIT	**R1034-02**
E.Z.N.A.® HP Total RNA Kit	20 - 70 µg	40 - 70 µl	1×10^7 cells or 10 - 30 mg tissue	50 Tests	**R6812-01**
E.Z.N.A.® HP Total RNA Kit	20 - 70 µg	40 - 70 µl	1×10^7 cells or 10 - 30 mg tissue	200 Tests	**R6812-02**
E.Z.N.A.® MicroElute® Total RNA Kit	1 - 30 µg	10 - 20 µl	1×10^6 cells or 15 mg tissue	50 Tests	**R6831-01**
E.Z.N.A.® MicroElute® Total RNA Kit	1 - 30 µg	10 - 20 µl	1×10^6 cells or 15 mg tissue	200 Tests	**R6831-02**
E.Z.N.A.® Total RNA Kit I	20 - 70 µg	40 - 70 µl	1×10^7 cells or 30 µg tissue	50 Tests	**R6834-01**
E.Z.N.A.® Total RNA Kit I	20 - 70 µg	40 - 70 µl	1×10^7 cells or 30 µg tissue	200 Tests	**R6834-02**
E.Z.N.A.® Total RNA Maxi Kit	1 - 2,5 mg	0,7 - 1,5 ml	5×10^8 cells or 200 mg - 1g tissue	5 T	**R6693-01**
E.Z.N.A.® Total RNA Midi Kit	0,5 - 1 mg	250 - 500 µl	1×10^8 cells or 50 - 200 mg tissue	25 Tests	**R6664-02**
Mag-Bind® Blood RNA 96 Kit, 50 µl (4×96)	200 ng		50 µl	1 KIT	**M2837-01**
E.Z.N.A.® Blood RNA Kit	1 - 7 µg	40 - 70 µl	10 - 1000 µl	5 Tests	**R6814-00**
E.Z.N.A.® Blood RNA Kit	1 - 7 µg	40 - 70 µl	10 - 1000 µl	50 Tests	**R6814-01**
E.Z.N.A.® Blood RNA Maxi Kit	50 - 350 µg	0,7 - 1,5 ml	Up to 50 ml	5 Tests	**R6616-01**
E.Z.N.A.® Blood RNA Midi Kit	10 - 70 µg	100 - 200 µl	Up to 10 ml	10 Tests	**R6615-01**
E-Z 96® Plant RNA Kit (2×96)	5 - 20 µg	20 - 100 µl	10 - 50 mg	1 KIT	**R1027-01**
E-Z 96® Plant RNA Kit (8×96)	5 - 20 µg	20 - 100 µl	10 - 50 mg	1 KIT	**R1027-02**
E.Z.N.A.® Plant RNA Maxi Kit	0,8 - 2 mg	3 - 5 ml	2 g	5 Tests	**R6629-01**
Mag-Bind® Plant RNA Kit	30 - 50 µg	50 - 100 µl	30 - 50 mg	50 Tests	**M6828-01**

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Description	Average yield	Elution volume	Sample size	Pk	Cat. No.
E-Z 96® Mag-Bind® Plant RNA 96 Kit (4×96)	30 - 50 µg	50 - 100 µl	20 mg	1 KIT	**M6927-01**
E.Z.N.A.® Viral RNA Kit		30 - 50 µl	150 µl	50 Tests	**R6874-01**
E.Z.N.A.® Viral RNA Kit		30 - 50 µl	150 µl	200 Tests	**R6874-02**

E.Z.N.A.® Total DNA/RNA Isolation Kit

VWR - Omega Bio-Tek

The E.Z.N.A.® DNA/RNA Isolation Kit is designed for the simultaneous isolation of both genomic DNA and total RNA from the same cells or tissues. The sample is first lysed and homogenised in a special denaturing buffer, spun to pellet RNA and undigested particles, and then the supernatant is applied to a HiBind® DNA spin column to bind DNA. The RNA pellet is dissolved and purified by a HiBind RNA spin column. Since there is no need to divide the sample into two parts for separate purification procedures, maximum yield of DNA and RNA can be purified from the entire sample.

- Isolation of both DNA and RNA from the same sample
- Short and streamline protocol delivery ready-to-use DNA and RNA
- Complete removal of contaminants and inhibitors
- No organic extractions
- DNA and RNA isolation in less than 30 minutes

Description	Average yield	Sample size	Pk	Cat. No.
E.Z.N.A.® Total DNA/RNA Isolation Kit	10 - 50 µg	1×10^7 cells or 30 mg tissue	50 Tests	**R6731-01**
E.Z.N.A.® Total DNA/RNA Isolation Kit	10 - 50 µg	1×10^7 cells or 30 mg tissue	200 Tests	**R6731-02**

E.Z.N.A.® SQ Total RNA Kit

VWR - Omega Bio-Tek

The E.Z.N.A.® SQ Total RNA Kit provides a reliable method for the isolation of high-quality of RNA from various animal and plant samples. This solution-based system can process single or multiple samples simultaneously in under 60 minutes. The convenient purification procedure removes contaminants and enzyme inhibitors such as proteins and divalent cation. The SQ Total RNA protocol can be easily scaled up or down according to the samples and downstream applications. RNA purified using the SQ Total RNA kit is suitable for most downstream applications such as RT-PCR, Northern blotting, and nuclease protection assay.

- No phenol/chloroform extractions
- Versatility in amount of starting material
- Process single or multiple samples in under 60 minutes
- High quality RNA can be used in most downstream applications

Description	Average yield	Elution volume	Sample size	Pk	Cat. No.
E.Z.N.A.® SQ Total RNA Kit (5 g tissue)	scalable	>35 µl	scalable	1 KIT	**R3053-05**
E.Z.N.A.® SQ Total RNA Kit (40 g tissue)	scalable	>35 µl	scalable	1 KIT	**R3053-40**

E.Z.N.A.® Tissue RNA Kit

VWR - Omega Bio-Tek

E.Z.N.A.® Tissue RNA Kit provides a rapid and easy method for the isolation of total RNA from difficult-to-lyse animal tissue samples including skeletal muscle, heart, and connective tissues. The Tissue RNA protocol integrates a Proteinase K digestion step in the RNA isolation procedure to breakdown the proteins. This step ensures easy and more efficient isolation of total RNA from fibre-rich tissues allowing improved yield and RNA quality. Purified RNA is ready for most downstream applications such as RT-PCR, Northern blotting, Poly(A)+ purification, nuclease protection, and *in vitro* translation.

- High quality RNA in under 60 minutes
- Optimised buffers ensure the reproducible results
- No organic extractions
- Purified RNA suitable for most downstream applications

Description	Average yield	Elution volume	Sample size	Pk	Cat. No.
E.Z.N.A.® Tissue RNA Kit	10 - 30 µg	40 - 70 µl	30 mg tissue	50 Tests	**R6688-01**
E.Z.N.A.® Tissue RNA Kit	10 - 30 µg	40 - 70 µl	30 mg tissue	200 Tests	**R6688-02**

E-Z 96® Tissue RNA Kit
VWR - Omega Bio-Tek

Based on the same technology as the E.Z.N.A.® Tissue RNA Kit, the E-Z 96® Tissue RNA Kit is designed for high throughput isolation of total RNA from samples that are difficult to lyse. E-Z 96® Tissue RNA Kit is designed for the isolation of total RNA from animal tissues, especially for difficult fibrous tissues such as skeletal muscle, heart and aorta tissue. This procedure completely removes contaminants and enzyme inhibitors making RNA isolation fast, convenient, and reliable. RNA purified using the E-Z 96® Tissue RNA method is ready for applications such as RT-PCR, Northern blotting, Poly(A)+ purification, nuclease protection, and *in vitro* translation.

- Isolation of RNA from 96 samples in less than 1 hour
- Reproducible RNA purification from a variety of samples
- No phenol/chloroform extractions
- Purified RNA suitable for most downstream applications

Description	Average yield	Sample size	Pk	Cat. No.
E-Z 96® Tissue RNA Kit (2×96)	5 - 10 µg	10 mg tissue	1 KIT	**R1088-01**

E.Z.N.A.® PX Blood RNA Kit
VWR - Omega Bio-Tek

E.Z.N.A.® PX Blood RNA Kit is designed for isolation of total RNA from blood samples stored in special preserved reagents and Paxgene™ tubes. The procedure completely removes contaminants and enzyme inhibitors making RNA isolation fast, convenient, and reliable. RNA purified using the E.Z.N.A.® PX RNA kit method is ready for applications such as RT-PCR.

Description	Average yield	Sample size	Pk	Cat. No.
E.Z.N.A.® PX Blood RNA Kit	8 - 12 µg	1× PAXgene® tube	5 Tests	**R1057-00**
E.Z.N.A.® PX Blood RNA Kit	8 - 12 µg	1× PAXgene® tube	200 Tests	**R1057-02**

Mag-Bind® PX Blood RNA 96 Kit
VWR - Omega Bio-Tek

The Mag-Bind® PX Blood RNA Kit allows for the isolation of total RNA from 2,5 ml of whole blood that has been stored in PAXgene® Blood RNA tubes. Stabilised blood samples are first spun down and the nucleic acid pellets are washed and recollected. After washing nucleic acid pellet is dissolved into a specially formulated resuspension buffer. At this point the samples can be transferred to 96-well plates for processing in robotic liquid handlers and magnetic processors. High quality intact RNA can be isolated in less than 90 minutes.

Description	Average yield	Sample size	Pk	Cat. No.
Mag-Bind® PX Blood RNA Kit (1×96)	8 - 12 µg	1× PAXgene® tube	1 KIT	**M7763-00**
Mag-Bind® PX Blood RNA Kit (4×96)	8 - 12 µg	1× PAXgene® tube	1 KIT	**M7763-01**

E.Z.N.A.® miRNA Isolation Kit
VWR - Omega Bio-Tek

The E.Z.N.A.® miRNA Isolation Kit uses a rapid procedure to isolate small RNAs, such as micro RNA (miRNA), small interfering RNA (siRNA), and small nuclear RNA (snRNA), from wide range of tissues and cells. The fast and efficient silica membrane based method isolates total RNA ranging in size from kilo based down to decamers. The kit also provides reagents and a procedure to enrich the population of RNAs that are 200 bases and smaller, which enhances the sensitivity of small RNA detection by solution hybridisation, Northern analysis, and other methods.

- Efficient isolation of small RNA containing total RNA
- Enrich for small RNA <200nt to increase sensitivity in downstream analysis
- Simple 30 minutes procedure
- Compatible with virtually all cell and tissue type

Description	Sample size	Pk	Cat. No.
E.Z.N.A.® miRNA Isolation Kit	1×10^7 cells or 50 mg tissue	50 Tests	**R7034-01**

E.Z.N.A.® Plant RNA Kit

VWR - Omega Bio-Tek

E.Z.N.A.® Plant RNA Kit provides a convenient and rapid method for the isolation of total RNA from a variety of plant samples. This kit provides a homogeniser column for filtration and homogenisation of viscous plant cell lysate by centrifugation in combination with the HiBind® RNA spin column for RNA purification. All the contaminants including polysaccharides and phenolic compounds are effectively removed. Purified RNA can be used for most downstream applications such as RT-PCR, Northern blot analysis, differential display, and poly(A)+ RNA selection.

- High quality RNA in 30 minutes
- No organic extractions
- Purified RNA suitable for most applications

Description	Average yield	Elution volume	Sample size	Pk	Cat. No.
E.Z.N.A.® Plant RNA Kit	30 - 60 µg	50 - 100 µl	10 - 100 mg	50 Tests	**R6827-01**
E.Z.N.A.® Plant RNA Kit	30 - 60 µg	50 - 100 µl	10 - 100 mg	200 Tests	**R6827-02**

E.Z.N.A.® Fungal RNA Kit

VWR - Omega Bio-Tek

Modified from the E.Z.N.A.® Plant RNA Kit, the E.Z.N.A.® Fungal RNA Kit uses an improved buffer system that is more efficient for fungal samples. This kit provides convenient and rapid methods for the isolation of total RNA from a variety of fungal species. Rather, the method involves a simple and rapid precipitation step for removal of much of the polysaccharides and phenolic compounds commonly found in fungal tissues. In combination with HiBind® RNA spin columns, this method permits purification of high quality RNA from as much as 200 mg tissue. The system is also efficient enough to purify total RNA from as little as 10 mg of tissue or 100 cells. Purified RNA can be used for many downstream applications such as RT-PCR, Northern Blotting, Poly(A)+ mRNA purification, and differential display.

- High quality RNA in less than 60 minutes
- Optimised buffer system ensures reproducible results
- No organic extractions
- Purified DNA suitable for most downstream applications

Description	Average yield	Elution volume	Sample size	Pk	Cat. No.
E.Z.N.A.® Fungal RNA Kit	10 - 30 µg	50 - 100 µl	100 mg	50 Tests	**R6840-01**

E.Z.N.A.® Bacterial RNA Kit

VWR - Omega Bio-Tek

The E.Z.N.A.® Bacterial RNA Kit is designed for isolation of high-quality total RNA from variety of bacterial strains. Up to 1×10^9 log-phase bacterial cells can be processed. This kit uses an improved lysis procedure to ensure the complete lysis of bacterial cells. Purified RNA is suitable for downstream applications such as RT-PCR and hybridisation techniques.

- Optimised buffers guarantee pure RNA every time
- No organic extractions
- Purified RNA suitable for most applications

Description	Average yield	Sample size	Pk	Cat. No.
E.Z.N.A.® Bacterial RNA Kit	20 - 60 µg	up to 1×10^9 bacteria	50 T	**R6950-01**

E.Z.N.A.® Mag-Bind® mRNA Kit

VWR - Omega Bio-Tek

By integrating the high capacity of Oligo(dT) magnetic particles with the efficient protection of RNAsafer technology, the E.Z.N.A.® Mag-Bind® mRNA Kit offers a fast and efficient method to directly purify mRNA from samples. Cell or tissue samples are first lysed and homogenised with RNA-Solv® Reagent. After a phenol/chloroform extraction, total RNA is precipitated with isopropanol. Redissolved total RNA is mixed with Oligo(dT) magnetic particles which will capture the mRNA. After two simple wash steps, mRNA is eluted from the magnetic beads or the beads with mRNA can be directly used for RT-PCR.

Description	Average yield	Pk	Cat. No.
E.Z.N.A.® Mag-Bind® mRNA Kit	2 - 20 µg	10 Tests	**R6570-01**

Mag-Bind® Viral DNA/RNA 96 Kit
VWR - Omega Bio-Tek

Mag-Bind® Viral DNA/RNA Kit is designed for the rapid and reliable isolation of viral RNA and viral DNA from whole blood, serum, plasma, saliva and other body fluids. The Mag-Bind® magnetic beads technology enables purification of high quality nucleic acids that is free of proteins, nucleases, and other impurities. In addition to easily being adapted with automated systems, this procedure can also be scaled up or down, allowing for the purification from various amounts of starting materials. The purified nucleic acid is ready for direct use in downstream applications, such as amplification or other enzymatic reactions.

- Rapid isolation of high quality, ready to use viral DNA and RNA
- No phenol/chloroform extraction
- Purification from various amounts of starting material
- Reproducible DNA and RNA purification from a variety of samples

Description	Sample size	Pk	Cat. No.
Mag-Bind® Viral DNA/RNA 96 Kit (1×96)	200 µl	1 KIT	**M6246-01**
Mag-Bind® Viral DNA/RNA 96 Kit (4×96)	200 µl	1 KIT	**M6246-02**
Mag-Bind® Viral DNA/RNA 96 Kit (12×96)	200 µl	1 KIT	**M6246-03**

Mag-Bind® Viral DNA/RNA Kit
VWR - Omega Bio-Tek

Mag-Bind® Viral DNA/RNA kit is designed for the rapid and reliable isolation of viral RNA and viral DNA from serum, plasma and body fluids. The Mag-Bind® magnetic beads technology enables purification of high-quality nucleic acid that are free of proteins, nucleases, and other impurities. The purified nucleic acid is ready for direct use in downstream applications, such as amplification or other enzymatic reactions. This system can be easily adapted with automated systems. The procedure can also be easily scaled up or down, allowing for the purification from various amounts of starting materials.

- Rapid isolation of high quality, ready-to-use viral DNA and RNA
- No phenol/chloroform extraction
- Purification from various amounts of starting material

Description	Sample size	Pk	Cat. No.
E.Z.N.A.® Mag-Bind® Viral DNA/RNA Kit	400 µl	200 Tests	**M6245-02**

E-Z 96® Viral RNA Kit
VWR - Omega Bio-Tek

Based on the same principle of E.Z.N.A.® Viral RNA kit, the E-Z 96® Viral RNA Kit is designed for simultaneously isolating viral RNA from up to 96 cell-free samples in 96-well plate format. E-Z 96® Viral RNA Kit is designed for isolation of Viral RNA from cell free fluids such as plasma, serum, urine, and cell culture supernatant. The procedure completely removes contaminants and enzyme inhibitors making viral RNA isolation fast, convenient, and reliable. This kit has been tested for isolating viral nucleic acids from hepatitis A, C, HIV. The kit is also suitable for isolation of total RNA from cultured cells, tissues, and bacteria. RNA purified using the E-Z 96® Viral RNA method is ready for applications such as RT-PCR.

- No phenol/chloroform extractions
- RNA is suitable for downstream applications

Description	Average yield	Elution volume	Pk	Cat. No.
E-Z 96® Viral RNA Kit (1×96)	<10 µg	60 - 100 µl	1 KIT	**R1074-00**
E-Z 96® Viral RNA Kit (4×96)	<10 µg	60 - 100 µl	1 KIT	**R1074-01**

E.Z.N.A.® HP Viral DNA/RNA Kit
VWR - Omega Bio-Tek

The E.Z.N.A.® HP Viral DNA/RNA Kit provides a faster and easier way to purify viral RNA and DNA. By using a proprietary buffer to concentrate viral nucleic acids from plasma, serum, and other body fluids, this kit provides an enhanced sensitivity in viral monitoring and other applications where the higher viral nucleic acid recovery efficiency is required.

- Rapid isolation of high quality, ready-to-use viral DNA/RNA
- No phenol/chloroform extractions
- Complete removal of contaminants and inhibitors
- Consistent, high quality yields

Description	Average yield	Pk	Cat. No.
E.Z.N.A.® HP Viral DNA/RNA Kit	<10 µg	50 Tests	**R6873-01**

E.Z.N.A.® MicroElute DNA Clean-Up Kit

VWR - Omega Bio-Tek

The E.Z.N.A.® MicroElute DNA Clean-Up Kit is designed to purify DNA fragments from enzymatic reactions (such as labelling reactions) with a small elution volume of 10 to 15 µl. This method uses HiBind® DNA columns to recover DNA bands from 100 bp to 10 kb, free of oligonucleotides, nucleotides, and enzymes in yields exceeding 85%. Binding conditions are adjusted by the addition of a specially formulated buffer, and the sample is applied to a specially designed HiBind® DNA MicroElute column. Following a rapid wash step, DNA is eluted with as little as 10 µl deionised water or Elution Buffer ready for downstream applications.

Description	Fragment size	Recovery	Elution volume	Pk	Cat. No.
E.Z.N.A.® MicroElute® DNA Clean-Up Kit	100 bp - 10 kb	85%	10 - 15 µl	50 Tests	**D6296-01**
E.Z.N.A.® MicroElute® DNA Clean-Up Kit	100 bp - 10 kb	85%	10 - 15 µl	200 Tests	**D6296-02**

E.Z.N.A.® MicroElute RNA Clean Up Kit

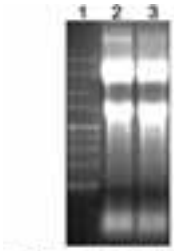
VWR - Omega Bio-Tek

The MicroElute RNA Clean-Up kit is designed to purify and concentrate RNA (from 50 µg down to picogram amounts) from enzymatic reactions or for desalting RNA samples (e.g. following phenol extraction and ethanol precipitation). The procedure uses lower elution volumes, making it well suited for applications require highly concentrated RNA sample.

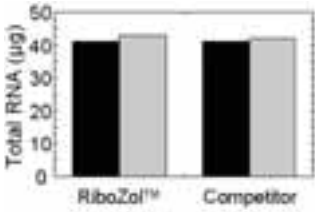
- Recovery of RNA from enzymatic reactions in 15 minutes
- No organic extractions
- Clean up RNA isolated by other methods, such as crude preps from organic extraction methods
- Concentrate small amounts of RNA to 10 - 15 µl

Description	Elution volume	Pk	Cat. No.
E.Z.N.A.® MicroElute® RNA Clean Up Kit	10 - 15 µl	50 Tests	**R6247-01**
E.Z.N.A.® MicroElute® RNA Clean Up Kit	10 - 15 µl	200 Tests	**R6247-02**

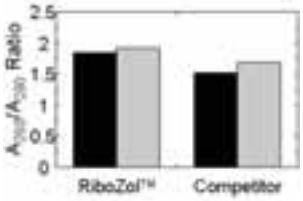
RNA extraction reagent, RiboZol™



RiboZol™ Extracted RNA. Total RNA was extracted from K562 cells (1x10⁶ cells) with RiboZol™ RNA Extraction Reagent. RNA pellets were resuspended in RiboReserve™ RNA storage buffer (R633). Samples were electrophoresed on a 1.2% Agarose (1% formaldehyde gel. Lane 1: RiboReady™ 1 kb RNA Ladder; Lanes 2 and 3: RiboZol™ extracted RNA samples.



RiboZol™ extracted RNA yields from 2 different cell lines. RNA was extracted from HeLa cell cultures (black) 1x10⁶ cells and from CaSki cultures (grey) 1x10⁶ cells according to standard procedures. Total RNA yields were determined by OD_{260}. *Data provided by Eunmi Ha, Catholic University, Korea.*



Purity of RiboZol™ extracted RNA from 2 different cell lines. RNA was extracted from HeLa cell cultures (black) 1x10⁶ cells and from CaSki cultures (grey) 1x10⁶ cells according to provided procedures. RNA purity was determined by the $OD_{260/280}$ ratio. *Data provided by Eunmi Ha, Catholic University, Korea.*

RiboZol™ RNA extraction reagent is optimised to produce high quality RNA from a variety of biological samples. RiboZol™ is a ready to use, single phase phenol solution for the isolation of total RNA from even the most difficult cell and tissue types. The sample is lysed directly in RiboZol™ to inhibit RNase activity and prevent RNA degradation during purification. RNA obtained by the RiboZol™ purification procedure is compatible with a variety of downstream applications.

- Isolate intact total RNA from even the most difficult of cells and tissue types
- Extract total RNA in less than a hour
- Achieve consistent results and excellent recovery of small RNAs
- Compatible with a variety of applications including Northern analysis, dot blots, cloning, in vitro translation, poly (A+) selection and RT-PCR

Description	Pk	Cat. No.
RNA extraction reagent, RiboZol™	30 ml	**N580-30ML**
RNA extraction reagent, RiboZol™	100 ml	**N580-100ML**
RNA extraction reagent, RiboZol™	200 ml	**N580-200ML**

PerfectPure™ RNA Purification Kits
5 PRIME

PerfectPure™ RNA Purification Kits utilise non chaotropic chemistries for isolating RNA from a variety of starting materials, such as blood, buffy coat, cultured cells, tissue and fibrous tissue. PerfectPure RNA kits eliminate the most common problems in RNA purification, namely overloading and clogging, leading to higher processing capacity and higher yields.

- Purify stable RNA in 20 minutes
- Fast and efficient process
- Complete kit, ready to use
- Purified RNA is suitable for any downstream application

Description	Sample size	Pk	Cat. No.
PerfectPure™ RNA Blood Kit	0,05 - 3 ml whole blood and buffy coat	50 Tests	**733-1073**
PerfectPure™ RNA Blood Kit	3 - 10 ml whole blood and buffy coat	50 Tests	**733-1074**
PerfectPure™ RNA Cultured Cell Kit	10000 to 5×10^7 cultured cells	10 Tests	**733-1075**
PerfectPure™ RNA Cultured Cell Kit	10000 to 5×10^7 cultured cells	50 Tests	**733-1076**
PerfectPure™ RNA Cultured Cell Kit	10000 to 5×10^7 cultured cells	250 Tests	**733-1077**
PerfectPure™ RNA Tissue Kit	0,5 - 40 mg tissue per column	10 Tests	**733-1078**
PerfectPure™ RNA Tissue Kit	0,5 - 40 mg tissue per column	50 Tests	**733-1079**
PerfectPure™ RNA Tissue Kit	0,5 - 40 mg tissue per column	250 Tests	**733-1080**
PerfectPure™ RNA Fibrous Tissue Kit	0,5 - 40 mg fibrous tissue per column	50 Tests	**733-1082**
PerfectPure™ RNA 96 Cell Kit for eight 96-well RNA isolations using centrifugation	5 - 5^6 cells	1 KIT	**733-1085**
PerfectPure™ RNA 96 Cell CS Kit for eight 96-well RNA isolations using centrifugation	5 - 5^6 cells	1 KIT	**733-1086**
PerfectPure™ RNA 96 CellVac Kit for eight 96-well RNA isolations by vacuum processing	5 - 5^6 cells	1 KIT	**733-1087**

Phase Lock Gel™
5 PRIME

Phase Lock Gel™ (PLG) eliminates interphase-protein contamination during phenol extraction and ensures faster results with improved recoveries. PLG migrates to form a tight seal between the phases of an aqueous/organic extraction during centrifugation. The organic phase and the interphase materials are effectively trapped in or below the barrier, thus enabling complete and easy decanting or pipetting of the entire aqueous phase. The benefits are increased yields of up to 30%, increased protection from exposure to hazardous compounds, and no risk of interphase sample contamination. For convenience, PLG is provided pre-dispensed into standard centrifuge tubes of various sizes.

PLG is available in two different density formulations – Heavy and Light – and it can be used in virtually any protocol that calls for extraction with phenol and/or chloroform, simply by selecting the formulation suitable for the organic and the aqueous phases.

- Yield of nucleic acids increased by up to 30% compared to conventional organic extraction
- Eliminates interphase contamination of nucleic acid solution
- Stable gel barrier allows easy sample decanting
- Reduced contact with hazardous organic solvents

PLG Heavy

Aqueous phase: High density sample (for example, high salt content)

Organic phase: Standard mixtures of phenol, chloroform, isoamyl alcohol with a chloroform fraction of at least 60% (Phenol as the sole organic solvent is not compatible with PLG Heavy)

PLG Light

Aqueous phase: Low-density sample

Organic phase: Standard mixtures of phenol, chloroform, isoamyl alcohol

Sample material	PLG type recommended
Genomic DNA from mouse tails	Use PLG Heavy to enhance isolation using a standard proteinase K/SDS organic extraction protocol
Plasmid DNA isolation	Use PLG Heavy to enhance isolation using standard alkaline lysis/phenol extraction procedures
Total RNA isolation	Use PLG Heavy to enhance isolation from cells and tissues using a modified guanidinium isothiocyanate/acid phenol method
Genomic DNA isolation	Use PLG Light to enhance isolation using standard proteinase K/SDS procedures
DNA isolation from agarose gels	Use PLG Light to enhance isolation of DNA fragments using phenol extraction procedures
Lambda Phage or M13 DNA isolation	Use PLG Light to enhance isolation of bacteriophage DNA using standard purification protocols

Description	Pk	Cat. No.
Phase Lock Gel™		
PLG Light: Tube size 1,5 ml for 100 - 500 µl sample size, 200 tubes	200	**713-2533**
PLG Light: Tube size 2,0 ml for 100 - 750 µl sample size, 200 tubes	200	**713-2535**
PLG Light: Tube size 15 ml for 1 - 6 ml sample size, 100 tubes	100	**713-2537**
PLG Light: Tube size 50 ml for 5 - 20 ml sample size, 25 tubes	25	**713-2539**

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Description	Pk	Cat. No.
Phase Lock Gel™		
PLG Heavy: Tube size 1,5 ml for 100 - 500 µl sample size, 200 tubes	200	**713-2534**
PLG Heavy: Tube size 2,0 ml for 100 - 750 µl sample size, 200 tubes	200	**713-2536**
PLG Heavy: Tube size 15 ml for 1 - 6 ml sample size, 100 tubes	100	**713-2538**
PLG Heavy: Tube size 50 ml for 5 - 20 ml sample size, 25 tubes	25	**713-2540**

E.Z.N.A.® and E-Z 96® Cycle Pure Kits
VWR - Omega Bio-Tek

E.Z.N.A.® Cycle Pure Kits are designed for the rapid purification of single- or double-stranded DNA from PCR or other enzymatic reactions. The purification procedure completely removes primers, nucleotides, enzymes, salts, and other impurities from DNA samples. E.Z.N.A.® MicroElute Cycle Pure Kits are specifically intended to purify PCR samples with a small elution volume of 10 to 15 µl. The E-Z® 96 Cycle Pure Kit procedure allows for the parallel purification of up to 96 PCR samples from multiple amplifications. The E-Z® 96 Cycle Pure Kit utilises multiwell technology for manual or fully automated high throughput purification.

Description	Fragment size	Recovery	Elution volume	Pk	Cat. No.
E.Z.N.A.® MicroElute Cycle Pure Kit	100 bp - 10 kb	85%	10 - 15 µl	50 Tests	**D6293-01**
E.Z.N.A.® MicroElute Cycle Pure Kit	100 bp - 10 kb	85%	10 - 15 µl	200 Tests	**D6293-02**
E.Z.N.A.® Cycle Pure Kit (V-Spin column)	100 bp - 10 kb	85%	30 - 50 µl	50 Tests	**D6492-01**
E.Z.N.A.® Cycle Pure Kit (V-Spin column)	100 bp - 10 kb	85%	30 - 50 µl	200 Tests	**D6492-02**
E.Z.N.A.® Cycle Pure Kit (Q-spin)	100 bp - 10 kb	85%	30 - 50 µl	50 Tests	**D6493-01**
E.Z.N.A.® Cycle Pure Kit (Q-spin)	100 bp - 10 kb	85%	30 - 50 µl	200 Tests	**D6493-02**
E-Z 96® Cycle Pure Kit (1×96)	100 bp - 10 kb	85%	80 - 100 µl	1 KIT	**D1043-01**
E-Z 96® Cycle Pure Kit (5×96)	100 bp - 10 kb	85%	80 - 100 µl	1 KIT	**D1043-02**

illustra™ ExoProStar™ 1-STEP Kits
GE Healthcare

illustra™ ExoProStar™ 1-STEP Kit uses illustra™ exonuclease I and alkaline phosphatase for optimal removal of unincorporated primers and nucleotides. illustra™ ExoProStar™ improves digestion efficiency with no degradation of the target PCR product. The sample remains completely intact and ready for immediate use in manual or automated processes.

- Both enzymes provided in one tube with just one simple pipetting step needed to prepare the reaction
- Fast 30 minute protocol; complete heat inactivation of the enzymes within 15 minutes
- Adaptable to different sizes
- Scalable for different reaction sizes
- No loss of PCR product
- Easy to automate

Description	Pk	Cat. No.
illustra™ ExoProStar™ 1-STEP Kit	100 Tests	**US77702**
illustra™ ExoProStar™ 1-STEP Kit	500 Tests	**US77705**
illustra™ ExoProStar™ 1-STEP Kit	2.000 Tests	**US77720**
illustra™ ExoProStar™ 1-STEP Kit	5.000 Tests	**US77750**

E.Z.N.A.® Gel Extraction Kits
VWR - Omega Bio-Tek

Gel purification of DNA is a common technique used for the isolation of specific DNA fragments. However, most methods either fail to completely remove agarose (which can lead to problems in downstream manipulations), shear the DNA, or result in very low yields.

Q-spin columns are capless to allow for fast processing of multiple samples. These columns offer high yields and can be used in centrifugation protocols. V-spin columns feature an attached cap and a standard luer outlet at the bottom for easy, leak-free connection to a vacuum manifold or luer hub needle. These columns can be used for both centrifugation and vacuum protocols.

The E.Z.N.A.® Gel Extraction kit uses HiBind® DNA spin-column technology to recover DNA bands 70 bp to 20 kb in length from all grades of agarose gel with yields up to 85%. The E.Z.N.A.® MicroElute Gel Extraction kit is designed for purification of DNA fragments from agarose gels with a small elution volume of 10 to 15 µl.

- DNA recovery from agarose gel in under 15 minutes
- Optimised buffers guarantee pure DNA
- No organic extractions necessary
- Purified DNA produced that is suitable for any downstream application

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Description	Fragment size	Recovery	Elution volume	Pk	Cat. No.
E.Z.N.A.® Gel Extraction kit (V-Spin column)	70 bp - 20 kb	85%	30 - 50 µl	50 Tests	**D2500-01**
E.Z.N.A.® Gel Extraction kit (V-Spin column)	70 bp - 20 kb	85%	30 - 50 µl	200 Tests	**D2500-02**
E.Z.N.A.® Gel Extraction Kit (Q-Spin column)	70 bp - 20 kb	85%	30 - 50 µl	50 Tests	**D2501-01**
E.Z.N.A.® Gel Extraction Kit (Q-Spin column)	70 bp - 20 kb	85%	30 - 50 µl	200 Tests	**D2501-02**
E.Z.N.A.® MicroElute Gel Extraction Kit	70 bp - 20 kb	80%	10 - 15 µl	50 Tests	**D6294-01**
E.Z.N.A.® MicroElute Gel Extraction Kit	70 bp - 20 kb	80%	10 - 15 µl	200 Tests	**D6294-02**

Decontamination solution, RNase-ExitusPlus™

AppliChem

RNase-ExitusPlus™ is a non-alkaline, non-corrosive and non-carcinogenic cleansing solution that is highly active against RNase contamination. RNase-ExitusPlus™ has been demonstrated to inactivate more than 20 µg of RNase A dried onto the bottom of a microcentrifuge tube. RNase-ExitusPlus™ is stable for approximately 18 months and heat resistant. It should be stored at room temperature; at colder temperatures a precipitate may form which is easily brought into solution at 37 °C. RNase-ExitusPlus™ is supplied in spray bottles and a 1 litre refill pack is also available.

- Catalytic and cooperative effects of the components cause a very rapid non-enzymatic, non-sequence-specific degradation of protein and RNase molecules
- All components of RNase-ExitusPlus™ are readily biologically degradable and not harmful or toxic for humans
- No aggressive mineralic acids or alkaline substances are used; equipment and materials are not damaged or corroded even after prolonged incubation times
- No organic solvents or volatile components, no toxic fumes
- Elevated temperatures above approx. 50 °C speed up the reaction and the efficiency

Description	Pk	Cat. No.
Decontamination solution, RNase-ExitusPlus™		
RNase-ExitusPlus™, spray bottle	250 ml	**A7153.0250**
RNase-ExitusPlus™, spray bottle	500 ml	**A7153.0500**
RNase-ExitusPlus™, spray bottle	1.000 ml	**A7153.1000**
Refill packs		
RNase-ExitusPlus™, refill pack	1 l	**A7153.1000RF**

Decontamination solution, DNA-ExitusPlus™

AppliChem

Solution for the removal of DNA and RNA contamination from surfaces. Suitable for cleaning PCR work stations and equipment, electrophoresis equipment, as well as pipettes and reaction tubes.

- All components are readily bio-degradable and not harmful or toxic for humans
- Doesn't contain aggressive mineral acids or alkaline substances
- No organic solvents or volatile components
- Delivered as spray bottles or refill bottles (RF)

Description	Pk	Cat. No.
Refill packs		
DNA-ExitusPlus™, refill pack	1 l	**A7089.1000RF**
DNA-ExitusPlus™, refill pack	2,5 l	**A7089.2500RF**

Decontamination solutions, RNase AWAY® and DNA AWAY®

Thermo Scientific

RNase AWAY® decontamination solution

Ready-to-use solution for fast, easy elimination of RNase contamination from work surfaces, instruments, pipettes, glass and consumables.

- Easy cleaning of various types of surfaces
- Ideal for use on materials that are not autoclavable
- Replaces time-consuming processes such as DEPC treatment

DNA AWAY® decontamination solution

Ready-to-use solution for eliminating DNA contamination. For cleaning work surfaces, instruments, pipettes, thermal cyclers, etc.

- Suitable for PCR applications, preventing false-positive PCR results
- Easy cleaning of various types of surfaces

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Description	Pk	Cat. No.
RNase AWAY®	250 ml	**732-2270**
RNase AWAY®	475 ml	**732-2351**
RNase AWAY®	1 l	**732-2271**
RNase AWAY®	4 l	**732-2352**
DNA AWAY®	250 ml	**732-2353**

Surface decontaminant, RNase Away™ and DNA Away™ wipes
Thermo Scientific

These surface decontaminants quickly and effectively remove unwanted RNase and DNA contamination from laboratory glassware, plastics, and stainless steel. They are also ideal for cleaning pipette barrels, gel boxes, benchtops, workstation hoods, and labware that cannot be autoclaved. RNase Away™ decontaminant is ideal for removing RNase and RNA contamination. DNA Away™ decontaminant is ideal for removing DNase and DNA contamination.

- Easy to use and safer than traditional alternatives such as DEPC
- Ready to use right out of the bottle
- Non abrasive and non biohazardous; will not damage plastic surfaces
- Chemically stable

Description	Pk	Cat. No.
Pre-saturated wipes, RNase Away™, packed in canister	25	**115-1250**
Pre-saturated wipes, DNA Away™, packed in canister	25	**115-1252**
Pre-saturated wipes, DNA Away™, packed individually	35	**115-1253**

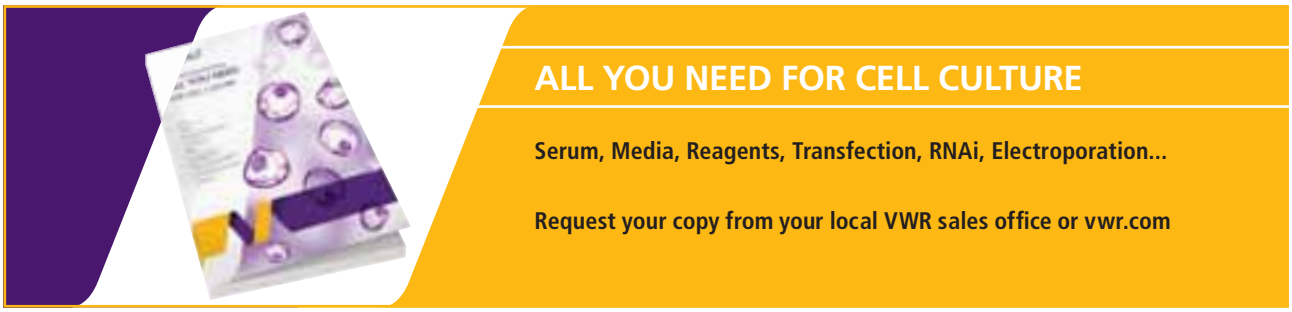
VWR COLLECTION

SELECTED FOR YOU

Dye terminator removal, Mag-Bind® SeqDTR™
VWR - Omega Bio-Tek

Mag-Bind® SeqDTR™ is designed for the effective and reliable removal of unincorporated terminators from sequencing reaction. Sequencing products are first mixed with the Mag-Bind® SeqDTR™. DNA then selectively binds to the Mag-Bind® SeqDTR™ particles. With two rapid wash steps, trace contaminants such as nucleotides, primers and small, non targeted amplification products are removed. Mag-Bind® SeqDTR™ can be processed in 96- and 384-well formats and is compatible with many liquid handling instruments.

Description	Elution volume	Pk	Cat. No.
Mag-Bind™ SeqDTR™	40 - 70 µl	5 ml	**M1300-05**
Mag-Bind™ SeqDTR™	40 - 70 µl	50 ml	**M1300-08**
Mag-Bind™ SeqDTR™	40 - 70 µl	500 ml	**M1300-50**



FTA® Cards

Whatman (GE Healthcare)

For the collection, transport, archiving and isolation of nucleic acids at room temperature

FTA® Cards contain chemicals that lyse cells, denature proteins and protect nucleic acids from nucleases, oxidation and UV damage. The cards rapidly inactivate organisms, including blood-borne pathogens, and prevent the growth of bacteria and other microorganisms. FTA® Cards are available in a variety of configurations. Applications include forensics, transgenics, transfusion medicine, plasmid screening, drug discovery and genomics.

FTA® Classic Card: Four sample areas for application of up to 500 µl whole blood or 100 µl plant homogenate per card. Convenient for multiple applications of the same specimen or for collection of multiple animal or plant samples on one card.

FTA® Mini Card: Two sample areas for application of up to 250 µl whole blood or 50 µl plant homogenate per card. Convenient for protocols that require different locations for testing and archiving of samples.

FTA® Micro Card: One sample area for application of up to 125 µl whole blood or 25 µl plant homogenate per card. Recommended when only one sample is needed.

FTA® Gene Card: Enclosed in a rigid card frame. Three sample areas for application of up to 225 µl whole blood or 30 µl plant homogenate per card. Can be utilised in many automatic dispensing/pipetting systems when used with the FTA® Gene Card tray.

Indicating FTA® Cards: Same as standard card but with a colour indicator that changes from pink to white when sample is applied. Recommended for use with colourless samples, such as buccal or cultured cells.

PlantSaver® FTA® Cards: Feature a laminated flap that allows vigorous crushing of the plant sample into the FTA® matrix without damaging the FTA® Card. Four sample areas per card.

- Nucleic acids are captured, immobilised, and stabilised for storage, all in one easy step
- Captured nucleic acid is ready for downstream applications in less than 30 minutes
- Nucleic acids collected on FTA® Cards remain stable for years at room temperature
- Indication FTA® Cards change colour upon sample application to facilitate handling of colourless samples

Description	Pk	Cat. No.
FTA® Cards		
FTA® Classic Card	100	**512-1079**
FTA® Classic Card	25	**512-1160**
FTA® Mini Card	100	**512-1077**
FTA® Mini Card	25	**730-1360**
FTA® Micro Card	100	**730-1359**
FTA® Micro Card	25	**512-1162**
FTA® Gene Card	100	**730-1358**
FTA® Gene Card	25	**733-1750**
Indicating FTA® Cards		
Indicating FTA® Classic Card	100	**730-1361**
Indicating FTA® Classic Card	25	**512-1161**
Indicating FTA® Mini Card	100	**512-1078**
Indicating FTA® Mini Card	25	**730-1362**
Indicating FTA® Micro Card	100	**512-1082**
Indicating FTA® Micro Card	25	**512-1163**
PlantSaver® FTA® Cards		
PlantSaver® FTA® Card	100	**730-1414**
PlantSaver® FTA® Card	25	**512-1164**

Description	Pk	Cat. No.
Accessories		
FTA® Gene Card tray	20	**730-1363**

FTA® Elute Cards
Whatman (GE Healthcare)

FTA® Elute Cards utilise Whatman FTA® technology that simplifies the handling and processing of nucleic acids. DNA is eluted in an easy step, providing DNA in solution ready for amplification.

The FTA® Elute matrix is chemically treated with proprietary reagents that lyse cells upon contact causing the release of nucleic acids. DNA is recovered from the FTA® Elute matrix through a simplified elution process using water and heat. Inhibitory components, such as haemoglobin, are retained on the FTA Elute matrix.

The Indicating FTA® Elute matrix is the same chemistry as FTA® Elute with an indicating dye that changes from purple to white upon application of a colourless sample such as saliva, urine, buccal cell swabs and cultured cells.

- Samples can be collected, shipped, and preserved at room temperature, eliminating the high costs associated with shipping samples on ice and with laboratory freezer storage
- Sample processing time to isolate DNA is 15 to 30 minutes, avoiding the need for lengthy and multiple step isolation procedures
- Sample processing requires a simple hot water elution procedure to isolate DNA eliminating the cost of using a purification kit
- Sample volume requirements are minimal: 12 to 40 µl per collection area, avoiding large blood volume handling/processing
- Haemoglobin, a known PCR inhibitor, is bound to the FTA® Elute matrix - DNA is recovered in solution free of PCR inhibitors

Description	Pk	Cat. No.
FTA® Elute Micro Card, 4 sample areas per card	25	**730-1364**
FTA® Elute Micro Card, 4 sample areas per card	100	**512-0527**
Indicating FTA® Elute Micro Card, 1 sample area per card	25	**730-1366**
Indicating FTA® Elute Micro Card, 1 sample area per card	100	**730-1365**

CloneSaver™ Cards
Whatman (GE Healthcare)

FTA technology in 96-well format for high throughput applications

Designed for the collection, long-term storage and purification of plasmid and BAC DNA in a 96-well format. Bacterial cultures, resuspended colonies or glycerol stock are applied, cells are lysed, and plasmid or BAC DNA is stabilised for long-term storage or immediate processing.

- Bacteriophages are inactivated
- DNA is easily accessible for downstream applications, such as transformation, PCR or sequencing
- Up to 96 samples can be stored on each card

Description	Pk	Cat. No.
CloneSaver™ Cards	5	**512-1149**
CloneSaver™ resealable multi-barrier pouch	50	**512-1070**
SPOT CloneSaver™ holder	100	**730-1425**

ALL YOU NEED FOR PROTEOMICS

- Protein expression
- Protein extraction
- Protein purification
- Protein analysis/detection

Request your copy from your local VWR sales office or vwr.com

FTA® DMPK Cards
Whatman (GE Healthcare)

Drug metabolism (DM), pharmacokinetic (PK) and toxicokinetic (TK) studies provide crucial insight into how drug candidates behave in the body and are therefore critical steps in drug development.

These types of analysis traditionally require large volumes of blood (generally 100 - 500 µl per subject per time point) to provide sufficient plasma volume for quantitative bioanalysis. Because only a limited blood volume can be drawn from each animal the number of serial samples is restricted and composite sampling must be used. This use results in lower quality PK data and an increase in the number of animals required. The large volumes also make it difficult to conduct studies in juvenile subjects. Additionally, plasma needs to be isolated from whole blood and prepared for bioanalysis using solid phase extraction, liquid-liquid extraction or protein precipitation. This time-consuming process limits throughput and consequently how many samples can be tested. Finally, there are practical challenges with shipping and storing blood samples that require controlled handling and frozen transportation and storage.

The dried blood spot (DBS) method is an alternative technique that overcomes these drawbacks.

DBS microvolume sampling using specialised Whatman media from GE Healthcare has been shown to be both precise and accurate for a variety of compounds from different structural classes with acceptable inter- and intra-assay variability. It is now being routinely employed in PK/TK studies. The FTA® DMPK-A and FTA® DMPK-B cards lyse cells and denature proteins on contact. FTA DMPKC card is not impregnated with chemicals and may be better suited for protein-based biomolecules. The choice of DMPK card depends on many factors, such as the analyte chemical structure, extraction solvent and analysis workflow. The final decision is usually determined empirically.

Samples can be shipped and stored at ambient temperature and long-term stability has been demonstrated for analytes and metabolites sensitive to plasma enzymes.

- Lower blood volumes, typically 10 to 20 µl per sample
- Simpler processing, the 3-step DBS procedure is much more straightforward than the cumbersome centrifugation, isolation and clean up of plasma
- Easier storage and transport, room temperature stability saves on cost of dry ice shipments

Description	Pk	Cat. No.
FTA® DMPK-A Card	100	**730-1421**
FTA® DMPK-B Card	100	**730-1422**
FTA® DMPK-C Card	100	**730-1423**

FTA® reagent and accessories
Whatman (GE Healthcare)

For collection, storage, processing and shipping FTA® Cards

FTA® purification reagent

For purification of nucleic acids stored on FTA® Cards.

- Ensures superior quality DNA for PCR or SNP analysis
- Removes haem, PCR inhibitors and other potential contaminants
- Non toxic, hypoallergenic, aqueous solution

Tips for Harris micro punches (2,0 mm)

Tips provide up to 2000 punches. Polished steel tip is case hardened and can be sterilised.

- Recommended for use with FTA® Cards containing buccal cells, plasmids and other samples with DNA content

Sterile foam tipped applicator

For the collection of saliva and buccal cells.

- Non abrasive foam head is the same size as sample area on indicating FTA® Cards to facilitate sample application

Sterile Omni swab

Non invasive device for collecting saliva and cheek buccal cells.

- Brush-like swab head easily ejects from the stem of the swab for transfer of samples into tubes or multiwell plates
- Pre-sterilised and individually wrapped for single use

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Multi-barrier pouches

For storing and transporting FTA® Cards.

- Seven laminated layers protect the card from exposure to gas or liquid contamination
- Tamper-evident seal maintains sample security
- Outer paper surface for labelling or writing

Description	Pk	Cat. No.
Bloodstain Card	100	**512-1150**
FTA® Gene Card tray	20	**730-1363**
FTA® purification reagent	500 ml	**512-1154**
Replacement tip for Harris micro punch, 2,0 mm	1	**512-1064**
Sterile Omni swab	100	**710-0527**
Sterile foam tipped applicators	100	**512-0020**
Multi-barrier pouch, small (80×70 mm)	100	**733-1751**
Multi-barrier pouch, large (90×150 mm)	100	**733-1752**
Dessicant packets (1 g)	1.000	**733-0201**

PALL Life Sciences

Protein Detection System, fortéBIO® BLItz™

The BLItz™ system brings the benefit of label-free protein detection to individual users. With a small footprint and affordable price, the BLItz™ system detects active proteins in just a drop of sample. Using Bio-Layer Interferometry (BLI) technology to detect small changes in the number of molecules bound to a disposable biosensor, real-time binding curves can be obtained in seconds, using as little as 4 µl of sample. With the binding rate proportional to the concentration of the target molecule, the highly sensitive BLItz™ system can detect ng/ml concentrations even in crude samples in some cases.

BLItz™ measurements can be used to complement and in some cases entirely replace more labour-intensive methods to assess: Binding pair optimisation, ligand binding studies, investigation of process conditions, or quantitative and kinetics studies.

- Determine protein presence/absence instantly, analyse binding kinetics at the bench
- Quantitate proteins in seconds and develop immunoassays in minutes
- No labels needed, saving time and reagent costs
- Only small sample volume required
- Simple to operate

Type	Required capture molecule	Analyte measured	Description
Protein A (ProA)	None	Many human and other IgG types	Binds with high affinity to the Fc region of human IgGs. Binds with moderate affinity to many subtypes of mouse and rabbit IgG. Applications include quantitation of IgG in cell line development, clone selection, process optimisation and production monitoring.
Protein G (ProG)	None	Many murine and other IgG types	Binds with high affinity to the Fc region of murine, rat, goat, and bovine IgGs. Binds with moderate affinity to many subtypes of human IgG. Applications include quantitation of IgG in cell line development, clone selection, process optimisation and production monitoring.
Protein L (ProL)	None	Most mouse, rat, human IgG and Fab	Binds with high affinity to most mouse, rat and human immunoglobulins containing a kappa light chain. Does not bind goat, bovine, rabbit or sheep IgG. Applications include quantitation of FAb fragments and of IgG in serum based culture.
Anti-GST (GST)	None	GST-tagged proteins, peptides	High affinity anti-GST antibody on biosensor binds GST-tagged proteins. Applications include quantitation of GST-tagged proteins and kinetics of proteins and peptides binding to GST-tagged proteins captured on biosensor.
Anti-Human Fab-CH1 (FAB)	None	hIgG, human Fab or human F(ab')2	Binds specifically to the CH1domain of human IgG, allowing quantitation and kinetic characterisation of human Fab, F(ab')2, and IgGs with no recognition towards free light chains.
Anti-Human IgG Fc Capture (AHC)	hIgG, human Fc fusion protein	Proteins, peptides, antibody fragments	Immobilisation of human IgG or other human Fc-containing proteins by binding to the human Fc region. Kinetic applications include protein and antibody kinetic and affinity characterisation (ka, kd, KD) and epitope binning.
Anti-Human IgG Quantitation (AHQ)	None	hIgG, human Fc fusion proteins	Binds specifically to the Fc portion of human IgGs and other proteins containing a human Fc region. Applications include quantitation of human IgG and proteins containing the human Fc region in cell line development, clone selection, process optimisation and production monitoring.
Anti-Mouse IgG Fc Capture (AMC)	mIgG, mouse Fc fusion protein	Proteins, peptides, antibody fragments	Binds the Fc portion of IgG1, IgG2a and IgG2b for capture-based immobilisation. Applications include kinetic analysis of antibody-antigen interactions (ka, kd, KD) and off-rate screening. IgG3 should be evaluated on a case-by-case basis.
Anti-Murine IgG Quantitation (AMQ)	None	mIgG, rat IgG, mouse-Fab, rat Fab	Binds specifically to the Fv(ab')2 portion of mouse and rat IgGs. Applications include quantitation of mouse and rat IgG in cell line development, clone selection, process optimisation and production monitoring.
Anti-Penta-HIS (HIS)	None	His-tagged proteins, peptides	Uses the Qiagen Penta-HIS antibody to bind with high affinity HIS tagged recombinant proteins. Applications include quantitation of HIS-tagged proteins.

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Ni-NTA (NTA)	None	His-tagged proteins, peptides	Nickel charged tris-NTA with strong binding to HIS-tagged recombinant proteins for kinetic measurements and quantitation.
Streptavidin (SA)	Biotin-tagged peptides, oligos, proteins	Proteins, peptides, oligos	Streptavidin-coated biosensor. Immobilises biotinylated antibodies, proteins and nucleic acids to form a stable surface. Quantitation applications include antibody and protein quantitation in cell line development, clone selection, process optimisation and production monitoring. Kinetic applications include protein and antibody kinetic and affinity analysis (ka, kd, KD), and epitope binning.
Amine Reactive (AR2G)	Proteins, peptides, oligos	Proteins, antibody fragments	Second generation carboxylate functionalised surface allows covalent coupling of proteins via EDC/s-NHS mediated amide bond formation. Kinetic applications include protein and antibody kinetic and affinity characterisation (ka, kd, KD). Requires AR2G Assay Kit (P/N 18-5095).
Aminopropylsilane (APS)	Proteins, peptides	Proteins, peptides	Adsorption of proteins and membrane fractions through hydrophobic moieties. Kinetic applications include adsorption of proteins and membrane fractions through hydrophobic moieties for kinetic and affinity analysis (ka, kd, KD).

Description	Pk	Cat. No.
BLItz™ system		
BLItz™ system	1	**733-2135**
Biosensors for use with the BLItz™ system		
Biosensor, Protein A (ProA), tray of 96	1	**733-2137**
Biosensor, Protein G (ProG), tray of 96	1	**733-2138**
Biosensor, Protein L (ProL), tray of 96	1	**733-2139**
Biosensor, Anti-GST (GST), tray of 96	1	**733-2144**
Biosensor, Anti-Human Fab-CH1 (fab), tray of 96	1	**733-2140**
Biosensor, Anti-Human IgG Fc Capture (AHC), tray of 96	1	**733-2148**
Biosensor, Anti-Human IgG Quantitation (AHQ), tray of 96	1	**733-2136**
Biosensor, Anti-Mouse IgG Fc Capture (AMC), tray of 96	1	**733-2147**
Biosensor, Anti-Mouse IgG Quantitation (AMQ), tray of 96	1	**733-2141**
Biosensor, Anti-Penta-HIS (HIS), tray of 96	1	**733-2143**
Biosensor, Ni-NTA (NTA), tray of 96	1	**733-2142**
Biosensor, Streptavidin (SA), tray of 96	1	**733-2145**
Biosensor, Amine Reactive (AR2G), tray of 96	1	**733-2146**
Biosensor, Aminopropylsilane (APS), tray of 96	1	**733-2149**
Reagents for use with the BLItz™ system		
BLItz™ reagent, IgG calibrators, standard range set, concentration range 1 to 100 µg/ml	1	**733-2151**
BLItz™ reagent, IgG calibrators, extended range set, concentration range 1 to 700 µg/ml	1	**733-2152**
BLItz™ reagent, kinetics buffer 10X	50 ml	**733-2153**
BLItz™ reagent, amine coupling 2G reagent kit	1 KIT	**733-2154**
BLItz™ reagent, sample diluent, 50 ml	50 ml	**733-2150**
BLItz™ reagent, sample diluent with ProClin® 300	50 ml	**733-2155**

Rapid Translation System (RTS)

5 PRIME

The Rapid Translation System (RTS) is a scalable *in vitro* protein expression platform that produces large amounts of protein for characterisation studies, functional assays, or structural analysis. RTS enables both transcription and translation utilising High-Yield (HY) and continuous-exchange, cell-free (CECF) technologies, with systems based on bacterial (*E. coli*) or eukaryotic (wheat germ) cell lysates. RTS offers the advantages of a cell-free protein expression system, whilst eliminating the need for laborious up and downstream steps typically associated with cell-based expression systems.

- No cells, no cloning
- Express microgram amounts of protein
- Choice of prokaryotic and eukaryotic lysates
- Dedicated kits for expression of functional disulphide-bonded proteins
- Easy scale-up with kits for analytical, medium scale (up to 6 mg) and large scale (up to 50 mg) expression

Description	Pk	Cat. No.
RTS expression kits		
RTS 100 *E.coli* linear template generation set, His_6-Tag, 96 reactions	1 KIT	**733-2334**
RTS pIVEX His_6-Tag, 2nd generation vector set, 10 µg of each	1 KIT	**733-2335**
RTS 100 *E.coli* HY kit, 24 reactions	1 KIT	**733-2338**
RTS 100 *E.coli* HY kit, 96 reactions	1 KIT	**733-2339**
RTS 100 *E.coli* disulphide kit, 24 reactions	1 KIT	**733-2340**
RTS 500 ProteoMaster *E.coli* kit, 5×1 ml reactions	1 KIT	**733-2341**
RTS 500 *E.coli* kit, 5×1 ml reactions	1 KIT	**733-2342**
RTS 500 *E.coli* disulphide kit, 5×1 ml reactions	1 KIT	**733-2343**
RTS 9000 *E.coli* HY kit, 1×10 ml reaction	1 KIT	**733-2344**
RTS 100 wheat germ linear template generation set, His_6-Tag, 96 reactions	1 KIT	**733-2345**
RTS pIVEX wheat germ His_6-Tag vector set, 10 µg of each	1 KIT	**733-2346**
RTS 100 wheat germ CECF kit, 24×50 µl reactions	1 KIT	**733-2347**
RTS 500 wheat germ CECF kit, 5×1 ml reactions	1 KIT	**733-2348**

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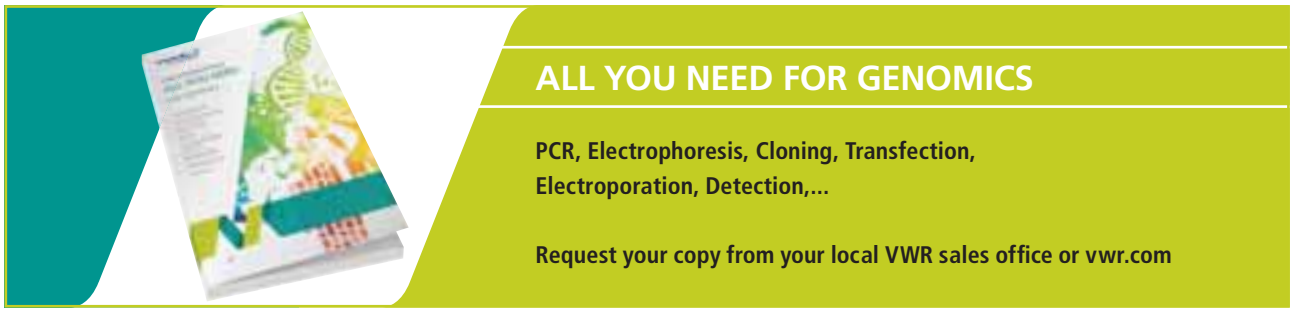
Description	Pk	Cat. No.
RTS *E.coli* accessories		
RTS DnaK supplement, 5 vials, 180 µl each, and 1 vial energy mix	1 KIT	**733-2336**
RTS GroE supplement, 5 vials, 125µl each	1 KIT	**733-2337**



Ampicillin sodium salt

Interferes with formation of bacterial cell wall. Working concentration: 50 µg/ml.

Description	Pk	Cat. No.
Ampicillin sodium salt, working concentration 50 µg/ml	25 g	0339-EU-25G
Ampicillin sodium salt, working concentration 50 µg/ml	100 g	0339-EU-100G

Water, sterile, nuclease-free

Prepared using diethylpyrocarbonate (DEPC) to ensure the removal of nuclease contamination.

Description	Pk	Cat. No.
Water, sterile, nuclease-free	100 ml	E476-100ML
Water, sterile, nuclease-free	500 ml	E476-500ML
Water, sterile, nuclease-free	1 l	E476-1L

Water, molecular biology grade

5 PRIME

Purified water, without chemical additives, for use in demanding applications.

Description	Pk	Cat. No.
Water, molecular biology grade	1 l	733-0150
Water, molecular biology grade	5 l	733-1090
Water, molecular biology grade (10×50 ml)	10	733-0153

X-Gal/IPTG ready solution

A sterile, ready to use 1000X solution available in two sizes (1,5 ml or in a convenient 10 ml dropper bottle).

Description	Pk	Cat. No.
X-Gal/IPTG ready solution	1,5 ml	N714-1.5ML
X-Gal/IPTG ready solution, dropper bottle format	10 ml	N714-10ML

X-Gal (5-bromo-4-chloro-3-indolyl-ß-D-galactopyranoside)

X-Gal is a chromogenic substrate for ß-Galactosidase that forms an intense blue precipitate. Used in conjunction with IPTG in a colorimetric assay, X-Gal allows differentiation of recombinants from non recombinants in cloning experiments with vectors containing the lacZ gene. It is also used in microbiology to detect microorganisms which have ß-Galactosidase activity.

Description	Pk	Cat. No.
X-Gal	1 g	437132J

Proteinase K from *Tritirachium album*, chromatographically purified

Used to inactivate DNases and RNases during isolation of nucleic acids.

Description	Pk	Cat. No.
Proteinase K from *Tritirachium album*	100 mg	390972X
Proteinase K from *Tritirachium album*	0,5 g	390973P
Proteinase K from *Tritirachium album*	10 g	39097CB

Dithiothreitol (Cleland's reagent)

Pk	Cat. No.
5 g	441494N
25 g	441496P

Dithiothreitol (Cleland's reagent), molecular biology grade

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Pk	Cat. No.
5 g	443852A

Dithiothreitol (DTT, Cleland's reagent)

AppliChem

Dithiothreitol (DTT) is, like β-mercaptoethanol, a reducing reagent for proteins and protects the cysteine residues against oxidation. It may substitute for β-mercaptoethanol in almost all experiments at three to four fold lower concentrations. DTT is less toxic, its odour is less intensive and it doesn't form mixed disulfides like β-mercaptoethanol.

Description	Pk	Cat. No.
Dithiothreitol (DTT, Cleland's reagent)	5 g	A1101.0005
Dithiothreitol (DTT, Cleland's reagent)	10 g	A1101.0010
Dithiothreitol (DTT, Cleland's reagent)	25 g	A1101.0025
Dithiothreitol (DTT, Cleland's reagent)	100 g	A1101.0100

Ethanol, molecular biology grade

Pk	Cat. No.
0,25 l	437433T
250 ml	437433TDP

DP = Duty Paid. Contact your local VWR office for further information.

Ammonium sulphate, molecular biology grade

Pk	Cat. No.
1 kg	444445Q
5 kg	444446R

Ammonium persulphate (APS)/TEMED polymerisation tablets

A pre-measured tablet for preparation of a working APS/TEMED solution. Each tablet prepares 1 ml of working solution when dissolved in 1 ml distilled, deionised water. This solution is stable for one week at room temperature.

Description	Pk	Cat. No.
APS/TEMED polymerisation tablets, 100/pack	100 Tab.	N310-100TAB

2-Mercaptoethanol

Pk	Cat. No.
500 ml	441435C

Sodium dodecyl sulphate, specially pure

Pk	Cat. No.
100 g	442442F
500 g	442444H
25 kg	44244HU

Sodium dodecyl sulphate (SDS), molecular biology grade

Pk	Cat. No.
50 g	444462R
500 g	444464T

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Sodium dodecyl sulphate solution 10% w/v Electran®

Pk	Cat. No.
100 ml	444062F

Sodium dodecyl sulphate AnalaR NORMAPUR®

A general biochemical reagent often used as a detergent for electrophoresis.

Pk	Cat. No.
100 g	108073J

Tris(hydroxymethyl)methylamine Electran®

Pk	Cat. No.
500 g	443864E
2,5 kg	443866G

Tween® 20, molecular biology grade

A detergent specifically tested for use in molecular biology applications.

Tween is a trademark of Atlas Chemical Industries Inc.

Pk	Cat. No.
100 ml	437082Q

EDTA (ethylenediaminetetraacetic acid), disodium salt, molecular biology grade

Pk	Cat. No.
1 kg	443885J

EGTA, molecular biology grade

Description	Pk	Cat. No.
EGTA, Electran®	10 g	437012C
EGTA, Electran®	25 g	437013D

Ficoll® 400, molecular biology grade

Ficoll 400 is a neutral, hydrophilic polymer of sucrose, which readily dissolves in aqueous solutions.

Pk	Cat. No.
25 g	437092S
250 g	437093T

Ficoll® is a registered trademark of Pharmacia Biotech AB.

Phosphate buffered saline (PBS), low phosphate, 10X

Irradiated concentrate of PBS, suitable for use in washing cells after dilution.

Pk	Cat. No.
10 l	437117K

Trypsin from bovine pancreas

Contains about 85% lactose as diluent; activity about 0,5 Anson units per g (calculated as at 35,5 °C), 1 Anson unit is that which hydrolyses urea denatured haemoglobin at such an initial rate under the specified conditions (25 °C) that the hydrolysis products formed per minute give the same absorbance with the Folin and Ciocalteu's reagent as 1 millimole of tyrosine. (Based on Anson, M.L., J. Gen. Physiol., 1938, 22, 79).

For *in-vitro* laboratory use only

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Pk	Cat. No.
250 g	390414M
5 kg	39041CU

Benzonase ELISA Kit II

For the immunological detection of Benzonase®

Kit comprises:
Five microtitre plates: Each plate contains 8 single strips (12 wells/strip) coated with antibody specific to Benzonase®
Reagent A (0,6 ml): Benzonase® standard solution (purity grade I, 99%); concentration 5 µg/ml in buffer solution
Reagent B (0,6 ml): POD conjugated rabbit antibodies against Benzonase® in stabilising buffer solution
Reagent C (100 ml): TMB Substrate

Description	Pk	Cat. No.
BENZONASE ELISA KIT, NEW		
Benzonase® ELISA Kit II	1 Set	1.01681.0001

CHAPS, 10% Solution

Description	Pk	Cat. No.
10% CHAPS solution, reagent grade	1 l	N907-1L

Proteinase K

Proteinase K is a non specific serine protease with a molecular weight of approximately 18 kDa. This enzyme exhibits high stability and activity in the presence of SDS, EDTA and urea, as well as over a wide pH range. Proteinase K is useful for the inactivation of nucleases during the isolation of DNA and RNA.

- Active over a broad pH range
- High purity

Description	Pk	Cat. No.
Proteinase K from *Tritirachium album*, lyophilised powder, activity >30 units/mg	100 mg	0706-100MG
Proteinase K from *Tritirachium album*, lyophilised powder, activity >30 units/mg	500 mg	0706-500MG
Proteinase K from *Tritirachium album*, lyophilised powder, activity >30 units/mg	1 g	0706-1G
Proteinase K from *Tritirachium album*, 20 mg/ml solution, activity >30 units/mg	5 ml	E195-5ML
Proteinase K from *Tritirachium album*, 20 mg/ml solution, activity >30 units/mg	25 ml	E195-25ML

Autoinduction media, ZYP-5052

ZYP-5052 autoinduction media is formulated to ensure consistent growth and protein expression using methodology developed by Dr. Studier at Brookhaven National Laboratory. ZYP-5052 autoinduction media activates recombinant protein expression in *E. coli* through diauxic growth, with the first growth phase producing a high density bacterial culture. During the second phase, *lac* promoters are activated and result in induction of prolific transcription and translation of the cloned DNA. A significant percentage of the total cell protein becomes comprised of recombinant DNA, which can then be isolated and purified for downstream applications.

- No monitoring cell density
- Automatic induction of protein expression
- High protein yield

Description	Pk	Cat. No.
Autoinduction media, ZYP-5052		
Autoinduction media, ZYP-5052	1 l	N990-1L

Triton® X-100

Triton® X-100 is a non-ionic detergent suitable for solubilising membrane proteins without altering biological activity.

Description	Pk	Cat. No.
Triton® X-100	50 ml	437002A

Taq DNA Polymerase

VWR® *Taq* DNA Polymerase is an ultra-pure, thermostable, recombinant DNA polymerase, which provides robust PCR performance in a wide range of PCR applications, without time-consuming optimisation. The enzyme is isolated from *Thermus aquaticus* and has a molecular weight of approximately 94 kDa. VWR® *Taq* DNA Polymerase has both a 5' - 3' DNA polymerase and a double strand 5' - 3' exonuclease activity. It leaves an A overhang, which makes the enzyme ideal for TA cloning. VWR® Red *Taq* DNA Polymerase is a blend of *Taq* DNA polymerase combined with an inert red dye. The dye enables quick visual recognition of reactions to which enzyme has been added, as well as confirmation of complete mixing. A glycerol-free *Taq* DNA Polymerase is also available for automation and freeze drying.

- Most suitable choice for routine applications where high fidelity is not required
- High performance, thermostable DNA polymerase
- Optimal for TA cloning

Taq DNA polymerase concentration: 5 Units/µl

10X Key Buffer: Tris-HCL pH 8,5, $(NH_4)_2SO_2$, 15 mM $MgCl_2$, 1% Tween-20®

10X Extra Buffer: 100 mM Tris-HCL pH 8,3, 500 mM KCl, 15 mM $MgCl_2$, 1% Triton X-100

10X Mg-Free Key Buffer: Tris-HCL pH 8,5, $(NH_4)_2SO_2$, 1% Tween-20®

10X Mg-Free Extra Buffer: Tris-HCL pH 8,3, KCl, 1% Triton X-100

Delivery information: VWR® *Taq* DNA Polymerase is usually supplied with either or both Key Buffer and Extra Buffer. Key Buffer (NH_4+) gives a superior amplification signal (high yield) and minimises the need for optimisation of the Mg^{2+} concentration or the annealing temperature in most primer-template systems. Extra Buffer is a traditional potassium (K+) buffer. Extra Buffer promotes high specificity but careful optimisation of primer annealing temperatures and Mg^{2+} concentrations may be required.

Description	Pk	Cat. No.
Taq DNA Polymerase, 10X Key Buffer (15 mM $MgCl_2$), 10X Extra Buffer (15 mM $MgCl_2$), 25 mM $MgCl_2$	250 EU	**733-1300**
Taq DNA Polymerase, 10X Key Buffer (15 mM $MgCl_2$), 10X Extra Buffer (15 mM $MgCl_2$), 25 mM $MgCl_2$	500 EU	**733-1301**
Taq DNA Polymerase, 10X Key Buffer (15 mM $MgCl_2$), 10X Extra Buffer (15 mM $MgCl_2$), 25 mM $MgCl_2$	1.000 EU	**733-1302**
Taq DNA Polymerase, 10X Key Buffer (15 mM $MgCl_2$), 10X Extra Buffer (15 mM $MgCl_2$), 25 mM $MgCl_2$	2.500 EU	**733-1819**
Taq DNA Polymerase, 10X Key Buffer (15 mM $MgCl_2$), 10X Extra Buffer (15 mM $MgCl_2$), 25 mM $MgCl_2$	5.000 EU	**733-1820**
Taq DNA Polymerase, 10X Key Buffer (15 mM $MgCl_2$), 10X Extra Buffer (15 mM $MgCl_2$), 25 mM $MgCl_2$	10.000 EU	**733-1303**
Taq DNA Polymerase, 10X $MgCl_2$-free Key Buffer, 25 mM $MgCl_2$	500 EU	**733-1311**
Taq DNA Polymerase, 10X $MgCl_2$-free Key Buffer, 25 mM $MgCl_2$	1.000 EU	**733-1312**
Taq DNA Polymerase, 10X $MgCl_2$-free Key Buffer, 25 mM $MgCl_2$	2.500 EU	**733-1313**
Taq DNA Polymerase, 10X $MgCl_2$-free Key Buffer, 25 mM $MgCl_2$	10.000 EU	**733-2009**
Taq DNA Polymerase, 10X $MgCl_2$-free Extra Buffer, 25 mM $MgCl_2$	500 EU	**733-1304**
Taq DNA Polymerase, 10X $MgCl_2$-free Extra Buffer, 25 mM $MgCl_2$	1.000 EU	**733-1305**
Taq DNA Polymerase, 10X Tween-free Key Buffer (15 mM $MgCl_2$), 10X Triton-free Extra Buffer (15 mM $MgCl_2$), 25 mM $MgCl_2$	1.000 EU	**733-1307**
Taq DNA Polymerase, 10X Tween-free Key Buffer (15 mM $MgCl_2$), 10X Triton-free Extra Buffer (15 mM $MgCl_2$), 25 mM $MgCl_2$	10.000 EU	**733-1823**
Red *Taq* DNA Polymerase, 10X Key Buffer (15 mM $MgCl_2$), 10X Extra Buffer (15 mM $MgCl_2$), 25 mM $MgCl_2$	2.500 EU	**733-1323**
Red *Taq* DNA Polymerase, 10X Key Buffer (15 mM $MgCl_2$), 10X Extra Buffer (15 mM $MgCl_2$), 25 mM $MgCl_2$	10.000 EU	**733-1834**
Taq DNA Polymerase, glycerol-free, 10X Key Buffer (15 mM $MgCl_2$), 10X Extra Buffer (15 mM $MgCl_2$), 25 mM $MgCl_2$	1.000 EU	**733-1817**
Taq DNA Polymerase, glycerol-free, without Key or Extra Buffer, 25 mM $MgCl_2$	5.000 EU	**733-1999**
Taq DNA Polymerase, glycerol-free, without Key or Extra Buffer, 25 mM $MgCl_2$, 200 000 units	1 KIT	**733-2038**

EU = Units

AccuPOL DNA Polymerase

AccuPOL DNA Polymerase is a thermostable enzyme that possesses 3' - 5' exonuclease proofreading ability, which enables the polymerase to correct nucleotide misincorporation errors. AccuPOL is recommended for applications which require extremely high fidelity with low error rate. PCR fragments generated with AccuPOL DNA Polymerase are also ideal for blunt end cloning.

Optimal reaction conditions are achieved by using the 10X Key Buffer containing 15 mM $MgCl_2$ provided with the enzyme. A separate vial of 25 mM $MgCl_2$ is also included in case a higher $MgCl_2$ concentration is required for a specific reaction.

- The choice for high fidelity amplifications
- Provides 16x higher fidelity than *Taq* DNA polymerase
- Optimal for blunt end cloning
- Processes <3 kb with extremely high fidelity

Description	Pk	Cat. No.
AccuPOL DNA Polymerase (2,5 U/µl), with 10X Key Buffer (15 mM $MgCl_2$), 25 mM $MgCl_2$	250 EU	**733-1324**
AccuPOL DNA Polymerase (2,5 U/µl), with 10X Key Buffer (15 mM $MgCl_2$), 25 mM $MgCl_2$	500 EU	**733-1325**
AccuPOL DNA Polymerase (2,5 U/µl), with 10X Key Buffer (15 mM $MgCl_2$), 25 mM $MgCl_2$	1.000 EU	**733-1326**
AccuPOL DNA Polymerase (2,5 U/µl), with 10X Key Buffer (Mg-free, Tween®-free), 25 mM $MgCl_2$	250 EU	**733-1328**
AccuPOL DNA Polymerase (2,5 U/µl), with 10X Key Buffer (Mg-free, Tween®-free), 25 mM $MgCl_2$	1.000 EU	**733-1329**

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EU = Units

TEMPase Hot Start DNA Polymerase

VWR® TEMPase Hot Start DNA Polymerases are highly stable polymerases, featuring higher specificity, superior sensitivity and greater yields compared to standard DNA polymerases. These features make them well suited for detection of low abundance targets. Other uses include screening, amplification of GC-rich sequences, multiplex PCR, direct PCR and qPCR. A glycerol-free TEMPase Hot Start DNA Polymerase is also available for automation and freeze drying.

The GC-Rich Template kit is specifically designed for difficult GC-rich sequences. Combined with TEMPase, GC buffers I and II promote excellent amplification. The kit is designed for initial testing before using one of the GC-TEMPase 2X Master Mixes.

Delivery information: VWR® TEMPase DNA polymerases generally include two different buffers, Key Buffer and Combination Buffer, which are each suited for different PCR requirements. Key Buffer (NH_4+) gives a superior amplification signal (high yield) and minimises the need for optimisation of the Mg^{2+} concentration or the annealing temperature in most primer-template systems. Combination Buffer is a mixture of K+ and NH_4+. It combines high specificity with good product yield and high tolerance to optimisation of primer annealing temperatures and Mg^{2+} concentrations due to its balanced ammonium-potassium formulation. Each buffer contains 15 mM $MgCl_2$ (1,5 mM in final volume). Additional $MgCl_2$ for easy optimisation is included in a separate vial.

Description	Pk	Cat. No.
TEMPase Hot Start DNA Polymerase, 5 U/µl, with 10X Key Buffer, 10X Combination Buffer and $MgCl_2$	500 EU	**733-1331**
TEMPase Hot Start DNA Polymerase, 5 U/µl, with 10X Key Buffer, 10X Combination Buffer and $MgCl_2$	2.500 EU	**733-1333**
TEMPase Hot Start DNA Polymerase, 5 U/µl, with 10X Key Buffer, 10X Combination Buffer and $MgCl_2$	10.000 EU	**733-1838**
TEMPase Hot Start DNA Polymerase, glycerol-free, 5 U/µl, without buffers	500 Tests	**733-2552**
TEMPase Hot Start DNA Polymerase, glycerol-free, 5 U/µl, without buffers	2.500 Tests	**733-2553**
TEMPase Hot Start DNA Polymerase, glycerol-free, 5 U/µl, with 10X Key Buffer and $MgCl_2$	500 Tests	**733-2555**
TEMPase Hot Start DNA Polymerase, glycerol-free, 5 U/µl, with 10X Key Buffer and $MgCl_2$	2.500 Tests	**733-2556**
TEMPase Hot Start DNA Polymerase, glycerol-free, 5 U/µl, with 10X Combination Buffer and $MgCl_2$	500 Tests	**733-2558**
TEMPase Hot Start DNA Polymerase, glycerol-free, 5 U/µl, with 10X Combination Buffer and $MgCl_2$	2.500 Tests	**733-2559**
GC-Rich DNA Target kit, with TEMPase Hot Start DNA Polymerase, 4X GC Buffers I and II, and 25 mM $MgCl_2$	500 Tests	**733-2567**

PCR beads, illustra™ PuReTaq Ready-To-Go™

GE Healthcare

illustra™ PuReTaq Ready-To-Go™ PCR beads are designed for performing standard PCR. The only additional reagents are water, template DNA and primers. The beads are provided in either 0,5 ml or 0,2 ml tubes that are compatible with most thermal cyclers. The 0,2 ml tubes come assembled in a 96-well (8×12) plate format that allows individual strips of eight tubes to be easily removed. This flexibility allows use of either the entire 96-well plate, strips of eight, or individual 0,2 ml tubes.

- Pre-mixed, pre-dispensed reactions for PCR featuring high performance PuReTaq DNA polymerase
- Pre-dispensed, single dose, ambient-temperature-stable beads ensure greater reproducibility between reactions, minimise pipetting steps and reduce the potential for pipetting errors and contamination
- Use of PuReTaq DNA polymerase and other high purity reagents ensures that each bead is free of contaminating DNA
- Optimised for standard PCR, each bead yields a reaction containing ~2,5 units of PuReTaq DNA polymerase, 10 mM Tris-HCl, (pH 9,0 at room temperature), 50 mM KCl, 1,5 mM $MgCl_2$, 200 µM of each dNTP, stabilisers, and BSA

Description	Pk	Cat. No.
illustra™ PuReTaq Ready-To-Go™ PCR beads (0,2 ml hinged tubes with cap)	96 Tests	**27-9559-01**
illustra™ PuReTaq Ready-To-Go™ PCR beads (0,2 ml tubes/multiwell plate)	96 Tests	**27-9557-01**
illustra™ PuReTaq Ready-To-Go™ PCR beads (0,2 ml tubes/multiwell plate), 5×96 reactions	480 Tests	**27-9557-02**
illustra™ PuReTaq Ready-To-Go™ PCR beads (0,5 ml tubes)	100 Tests	**27-9558-01**

Taq DNA Polymerase

5 PRIME

An ultra-pure, thermostable recombinant DNA polymerase offering the highest purity, reproducibility and processivity. The enzyme provides a thermostability that meets the requirements of specialised protocols. An initial incubation of 20 minutes at 95 °C before starting the PCR reaction does not significantly influence the activity of the enzyme.

- High yield and specificity
- Self adjusting Mg^{2+} buffer technology minimises PCR optimisation

Product comprises: *Taq* DNA polymerase (5 U/µl), 10X reaction buffer with Mg^{2+}, and separate vial of 25 mM magnesium solution.

Description	Pk	Cat. No.
Taq DNA Polymerase, 100 U (40 - 100 reactions of 50 µl)	100	**733-0105**
Taq DNA Polymerase, 250 U (100 - 250 reactions of 50 µl)	250	**733-0107**
Taq DNA Polymerase, 1000 U (400 - 1000 reactions of 50 µl)	1000	**733-0180**
Taq DNA Polymerase, 5000 U (5×1000 U; 2000 - 5000 reactions of 50 µl)	5000	**733-0991**

Taq DNA Polymerase, ThermoPrime Plus
Thermo Scientific

ThermoPrime Plus *Taq* DNA Polymerase is a 94 kDa ultra-pure recombinant DNA polymerase obtained by high level expression of the *Taq* DNA polymerase gene in *E. coli*. This enzyme exhibits enhanced thermal stability, with the result that it can be shipped at ambient temperature with no loss of activity. It is licensed and optimised for use in the PCR reaction.

- Enhanced thermal stability at DNA denaturation temperatures
- Extended long-term stability
- Proven performance in excess of 12 kb for basic templates

Licensed for PCR
Storage: Store below 0 °C, preferably at –20 °C, in a constant temperature freezer. Shipped on ice.

Description	Pk	Cat. No.
ThermoPrime Plus *Taq* DNA polymerase (2500 U) with 10X buffer and separate vial of 25 mM $MgCl_2$, 4000×25 µl reactions	2500	**733-0005**

Phusion® Hot Start II High-Fidelity DNA Polymerase
Thermo Scientific

Phusion® Hot Start II High-Fidelity DNA Polymerase allows the use of a wide range of primers, including those with low melting temperatures. Phusion® Hot Start II High-Fidelity DNA Polymerase is ideal for PCR applications from routine PCR to highly demanding applications, such as cloning and high throughput PCR. It incorporates a unique dsDNA-binding domain making this Pyrococcus-like proofreading DNA polymerase extremely robust, rapid, and accurate.

- No annealing temperature limitations
- Allows reaction set up at room temperature
- Zero-time reactivation due to unique Hot Start technology
- Fast PCR enzyme with extreme fidelity (over 6 times more accurate than *Pfu*)
- Robust enzyme with high tolerance against PCR inhibitors requires minimal optimisation

Description	Pk	Cat. No.
Phusion® Hot Start II High-Fidelity DNA Polymerase, 100 U (2 U/µl)	100 EU	**F-549S**
Phusion® Hot Start II High-Fidelity DNA Polymerase, 500 U (2 U/µl)	500 EU	**F-549L**

DNA Polymerases

KOD HiFi DNA Polymerase is a unique proofreading enzyme, isolated from the extreme thermophile *Thermococcus kodakaraensis* KOD1, which possesses superior processivity and fidelity that enables faster and more accurate PCR amplification than can be achieved with conventional enzymes.

KOD HiFi DNA Polymerase is also available in a hot start version for high specificity and increased read length, and as a blend (KOD XL DNA Polymerase) recommended for very long templates.

Nova*Taq*™ DNA Polymerase is a high-purity, recombinant enzyme suitable for any application requiring premium quality *Taq* DNA polymerase.

For increased specificity and convenience with standard PCR, Nova*Taq* Hot Start DNA Polymerase is a chemically modified form of the enzyme that becomes active when heated at 95 °C for 7 to 10 minutes.

Description	Pk	Cat. No.
DNA polymerase		
Nova*Taq* DNA polymerase	100	**71003-3**
Nova*Taq* DNA polymerase	500	**71003-4**
Nova*Taq* DNA polymerase	2500	**71003-5**
KOD HiFi DNA polymerase	250	**71085-3**
KOD Hot Start DNA polymerase	200	**71086-3**
KOD Hot Start DNA polymerase	1000	**71086-4**
KOD XL DNA polymerase	250	**71087-3**
KOD XL DNA polymerase	1250	**71087-4**
NovaTaq Hot Start DNA polymerase	250	**71091-3**
NovaTaq Hot Start DNA polymerase	1250	**71091-4**

HotMaster *Taq* DNA Polymerase
5 PRIME

Hot start is a well established and convenient method to improve specificity of PCR. However, conventional technologies, like antibody mediated inhibition or chemical blocking of DNA polymerases, carry a few limitations - long initial activation steps may be required, the performance of the DNA polymerase can be reduced or specificity control may be compromised. HotMaster *Taq* DNA Polymerase uses an innovative technology to achieve hot start PCR. A thermostable inhibitor of the *Taq* DNA polymerase is released at high temperatures, thereby immediately activating the enzyme. The HotMaster technology not only provides hot start control at reaction set-up, but also cold stop during the annealing step of each cycle of PCR.

- Hot start/cold stop technology requires no enzyme activation step making it ideal for fast PCR protocols
- Convenient room temperature reaction set-up
- Highly specific amplification
- Minimal optimisation with self adjusting Mg^{2+} buffer technology

Product comprises: HotMaster *Taq* DNA Polymerase (5 U/µl) and 10X HotMaster *Taq* Buffer with 25 mM Mg^{2+}.

Description	Pk	Cat. No.
HotMaster *Taq* DNA Polymerase, 100 U (40 - 80 reactions of 50 µl)	100	**733-0117**
HotMaster *Taq* DNA Polymerase, 250 U (100 - 200 reactions of 50 µl)	250	**733-0118**
HotMaster *Taq* DNA Polymerase, 1000 U (400 - 800 reactions of 50 µl)	1000	**733-0119**
HotMaster *Taq* DNA Polymerase, 5000 U (2000 - 4000 reactions of 50 µl)	5000	**733-0992**

VWR COLLECTION

SELECTED FOR YOU

TEMPase Hot Start 2X Master Mix

TEMPase Hot Start DNA Polymerase Master Mix and Blue TEMPase Master Mix are good alternatives to TEMPase Hot Start DNA Polymerase. The master mixes offer easy reaction assembly at room temperature, reduced set-up time and fewer handling steps, which lead to increased reproducibility. As a consequence TEMPase Hot Start DNA Polymerase Master Mix is highly suited for standard tests.

The blue loading dye in Blue TEMPase Hot Start DNA Polymerase Master Mix facilitates direct gel loading and eliminates the need for separate loading dye - no need for time-consuming sample preparation before electrophoresis.
Ready-to-use GC TEMPase 2X Master Mixes I and II are designed for amplification of GC-rich sequences. Multiplex 2X Master Mix is composed of TEMPase Hot Start DNA Polymerase and a specialised buffer system designed for multiplex PCR. Additional $MgCl_2$ is included in the kit to enable optimisation.

Delivery information: TEMPase Hot Start DNA Polymerase Master Mix and Blue TEMPase Master Mix are available in two variations, either based on Key Buffer (Master Mix K) or Combination Buffer (Master Mix C) to suit different PCR requirements.

Description	Pk	Cat. No.
TEMPase Hot Start 2X Master Mix, with Master Mix C, 1,5 mM $MgCl_2$	500 Tests	**733-2548**
TEMPase Hot Start 2X Master Mix, with Master Mix C, 1,5 mM $MgCl_2$	2.500 Tests	**733-1840**
TEMPase Hot Start 2X Master Mix, with Master Mix K, 1,5 mM $MgCl_2$	500 Tests	**733-2581**
TEMPase Hot Start 2X Master Mix, with Master Mix K, 1,5 mM $MgCl_2$	2.500 Tests	**733-2582**
Blue TEMPase Hot Start 2X Master Mix, with Blue Master Mix C, 1,5 mM $MgCl_2$	500 Tests	**733-2290**
Blue TEMPase Hot Start 2X Master Mix, with Blue Master Mix C, 1,5 mM $MgCl_2$	2.500 Tests	**733-1841**
Blue TEMPase Hot Start 2X Master Mix, with Blue Master Mix K, 1,5 mM $MgCl_2$	500 Tests	**733-2584**
Blue TEMPase Hot Start 2X Master Mix, with Blue Master Mix K, 1,5 mM $MgCl_2$	2.500 Tests	**733-2585**
GC TEMPase Hot Start 2X Master Mix, with Master Mix I, 1,5 mM $MgCl_2$	500 Tests	**733-2561**
GC TEMPase Hot Start 2X Master Mix, with Master Mix I, 1,5 mM $MgCl_2$	2.500 Tests	**733-2562**
GC TEMPase Hot Start 2X Master Mix, with Master Mix II, 1,5 mM $MgCl_2$	500 Tests	**733-2564**
GC TEMPase Hot Start 2X Master Mix, with Master Mix II, 1,5 mM $MgCl_2$	2.500 Tests	**733-2565**
Multiplex TEMPase Hot Start 2X Master Mix, 1,5 mM $MgCl_2$ with separate vial of $MgCl_2$	500 Tests	**733-2568**
Multiplex TEMPase Hot Start 2X Master Mix, 1,5 mM $MgCl_2$ with separate vial of $MgCl_2$	2.500 Tests	**733-2569**

ALL YOU NEED FOR PROTEOMICS

- Protein expression
- Protein extraction
- Protein purification
- Protein analysis/detection

Request your copy from your local VWR sales office or vwr.com

Taq DNA Polymerase Master Mix

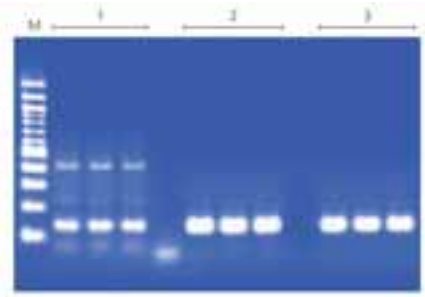
VWR® *Taq* DNA Polymerase Master Mix is a ready to use 1,1X or 2X reaction mix. Simply add primers, template and water to carry out primer extensions and other molecular biology applications.

VWR® Red *Taq* DNA Polymerase Master Mix, which also contains an inert red dye, can be directly loaded onto an agarose gel without addition of electrophoresis loading buffers.

Description	Pk	Cat. No.
Taq DNA Polymerase 1,1X Master Mix, 1,5 mM $MgCl_2$	500 Tests	**733-2540**
Taq DNA Polymerase 1,1X Master Mix, 1,5 mM $MgCl_2$	2.500 Tests	**733-1314**
Taq DNA Polymerase 1,1X Master Mix, 2,0 mM $MgCl_2$	500 Tests	**733-2541**
Taq DNA Polymerase 1,1X Master Mix, 2,0 mM $MgCl_2$	2.500 Tests	**733-1315**
Taq DNA Polymerase 2X Master Mix, 1,5 mM $MgCl_2$	500 Tests	**733-2542**
Taq DNA Polymerase 2X Master Mix, 1,5 mM $MgCl_2$	2.500 Tests	**733-1316**
Taq DNA Polymerase 2X Master Mix, 2,0 mM $MgCl_2$	500 Tests	**733-2543**
Taq DNA Polymerase 2X Master Mix, 2,0 mM $MgCl_2$	2.500 Tests	**733-1317**
Red *Taq* DNA Polymerase 1,1X Master Mix, 1,5 mM $MgCl_2$	500 Tests	**733-2544**
Red *Taq* DNA Polymerase 1,1X Master Mix, 1,5 mM $MgCl_2$	2.500 Tests	**733-1318**
Red *Taq* DNA Polymerase 1,1X Master Mix, 2,0 mM $MgCl_2$	500 Tests	**733-2545**
Red *Taq* DNA Polymerase 1,1X Master Mix, 2,0 mM $MgCl_2$	2.500 Tests	**733-1319**
Red *Taq* DNA Polymerase 2X Master Mix, 1,5 mM $MgCl_2$	5.000 Tests	**733-2130**
Red *Taq* DNA Polymerase 2X Master Mix, 1,5 mM $MgCl_2$	2.500 Tests	**733-1320**
Red *Taq* DNA Polymerase 2X Master Mix, 1,5 mM $MgCl_2$	500 Tests	**733-2546**
Red *Taq* DNA Polymerase 2X Master Mix, 1,5 mM $MgCl_2$	10.000 Tests	**733-2131**
Red *Taq* DNA Polymerase 2X Master Mix, 1,5 mM $MgCl_2$	20.000 Tests	**733-2132**
Red *Taq* DNA Polymerase 2X Master Mix, 2,0 mM $MgCl_2$	500 Tests	**733-2547**
Red *Taq* DNA Polymerase 2X Master Mix, 2,0 mM $MgCl_2$	2.500 Tests	**733-1321**

Tests = Reactions

HotMasterMix (2,5X)
5 PRIME



HotMasterMix is a ready to use 2,5X reagent mix for performing high throughput PCR (based on hot start/cold stop technology). The HotMasterMix guarantees the highest specificity and consistency. The key component of the mix is the HotMaster *Taq* DNA polymerase that consists of a pre-mixed HotMaster inhibitor that binds and blocks the substrate-binding site of HotMaster *Taq* in a temperature-dependent manner. At temperatures above 60 °C, the inhibitor is released and the HotMaster *Taq* becomes activated (hot start). At temperatures below 60 °C, the inhibitor inactivates the *Taq* polymerase (cold stop) preventing non specific primer annealing or primer-dimer formation. Unlike many conventional hot start PCR techniques, such binding-releasing equilibrium is reversible throughout the PCR cycle.

- Highly specific PCR
- Ready to use master mix format
- Convenient storage at 4 °C eliminates freeze and thaw cycles
- Minimal optimisation with self adjusting Mg^{2+} buffer technology

Product comprises: *Taq* DNA polymerase (1,0 U/50 µl reaction), KCl, Mg^{2+} and dNTPs.

Description	Pk	Cat. No.
HotMasterMix, 100 reactions 50 µl each	100 Tests	**733-0120**
HotMasterMix, 1000 reactions 50 µl each	1000 Tests	**733-0121**

MasterMix (2,5X)
5 PRIME

For robust amplification with minimal reaction set-up, this 2,5X MasterMix is ready to use and offers high reproducibility for large sample series. Because only primer and template need to be added to the 2,5X concentrate, MasterMix reduces the number of time consuming pipetting steps. This not only reduces the likelihood of errors and the risk of contamination, but also increases precision and sample throughput.

- Ready to use master mix format
- Minimal optimisation with self-adjusting Mg^{2+} buffer technology
- Convenient 4 °C storage eliminates freeze and thaw cycles

Product comprises: *Taq* DNA polymerase (0,06 U/µl), nucleotides, 25 mM magnesium solution, 2,5X Reaction Buffer and Master *Taq* to ensure high yields and excellent stability of the reaction components.

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Description	Pk	Cat. No.
2,5X MasterMix (2×1 ml), 100 reactions of 50 µl	100 Tests	**733-0106**
2,5X MasterMix (20×1 ml), 1000 reactions of 50 µl	1000 Tests	**733-0113**

MasterTaq Kits
5 PRIME

MasterTaq Kits are designed to ensure improved yield and reliable PCR products. The TaqMaster PCR Enhancer (5X concentration) has been specifically developed to improve the amplification of difficult templates by stabilising the enzyme during the reaction process. TaqMaster PCR Enhancer improves the thermostability of the *Taq* DNA polymerase and makes it less sensitive to exogenous PCR inhibiting contamination. Impure and GC-rich templates show increased yields and reproducible results.

Kit comprises: TaqMaster PCR Enhancer (5X), *Taq* DNA Polymerase (5 U/µl), Reaction Buffer (10X), and Mg^{2+}.

Description	Pk	Cat. No.
MasterTaq Kit, 250 U (100 - 250 reactions of 50 µl)	250	**733-0114**
MasterTaq Kit, 1000 U (400 - 1000 reactions of 50 µl)	1000	**733-0116**

PCR Extender System
5 PRIME

The PCR Extender system is a 3-in-1 kit for PCR applications. This system provides outstanding long-range PCR product yields and achieves fragment lengths up to 40 kb. A tuning buffer prevents the acidic hydrolysis (strand breakage) of very long templates, thus markedly increasing the sensitivity of the PCR. The high fidelity buffer and unique enzyme mix ensure minimal errors in proofreading reactions, usually obtained only with specialised high fidelity kits. The unique enzyme blend and buffer combination successfully amplifies templates with a GC-content in excess of 70%.

- Efficient amplification up to 40 kb with high yields
- Low error rate and optimised processivity with proofreading enzyme
- Minimal optimisation with self adjusting Mg^{2+} buffer technology
- Optimised amplification of complex and rare targets

Kit comprises: PCR Extender polymerase mix (5 U/µl), 10X tuning buffer (with Mg^{2+}), 10X high fidelity buffer (with Mg^{2+}), and 25 mM magnesium solution.

Description	Pk	Cat. No.
PCR Extender system, 100 U (50 - 100 reactions)	100	**733-0189**
PCR Extender system, 200 U (100 - 200 reactions)	200	**733-0190**
PCR Extender system, 500 U (250 - 500 reactions)	500	**733-0191**

Extensor Hi-Fidelity PCR Master Mix
Thermo Scientific

The Extensor Hi-Fidelity PCR Master Mix provides a convenient way of performing high fidelity or long PCR (>20 kb) and reduces the risk of contamination and reagent handling errors. The Extensor PCR enzyme mix, reaction buffer, dNTPs and $MgCl_2$ are all present in the master mix. Extensor Buffer 1 is suitable for amplifications up to 12 kb. The master mix is also available in ReddyMix™ format.

- At least four times better fidelity than standard *Taq* DNA polymerase
- Double the yields of *Taq* DNA polymerase
- Significant time savings in PCR preparation
- Fewer reagent handling steps reduces the chance of errors

Description	Pk	Cat. No.
Extensor Hi-Fidelity PCR® MasterMix		
Extensor Hi-Fidelity PCR Master Mix with Buffer 1, 400×25 ul	400 Tests	**733-0738**
Extensor Hi-Fidelity PCR Master Mix with Buffer 1, ReddyMix™ version, 400×25 ul	400 Tests	**733-0740**

Enzymes
AppliChem

Description	Pk	Cat. No.
RNase A	100 mg	**A2760.0100**
RNase A	1 g	**A2760.1000**
DNase I	10 mg	**A3778.0010**
DNase I	50 mg	**A3778.0050**
DNase I	100 mg	**A3778.0100**
DNase I	500 mg	**A3778.0500**
RNase A (DNase-free)	50 mg	**A3832.0050**
RNase A (DNase-free)	250 mg	**A3832.0250**
RNase A (DNase-free)	500 mg	**A3832.0500**
Proteinase K		
Proteinase K solution	1 ml	**A4392.0001**
Proteinase K solution	5 ml	**A4392.0005**
Proteinase K solution	10 ml	**A4392.0010**
α-Chymotrypsin from bovine pancreas Grade I	1 g	**A4531.0001**
α-Chymotrypsin from bovine pancreas Grade I	5 g	**A4531.0005**
Uracil-DNA Glycosylase (UDG)		
Uracil-DNA glycosylase (UDG)	200 EU	**A5234.0200**

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Description	Pk	Cat. No.
α-Amylase from saliva, human		
α-Amylase from saliva, human	500 EU	**A6948.0500**
α-Amylase from saliva, human	5.000 EU	**A6948.5000**
α-Amylase from pancreas, human		
α-Amylase from pancreas, human	10 EU	**A6949.0010**
Elastase, neutrophil Grade 2, human		
Elastase, neutrophil Grade 2, human	1 mg	**A6959.0001**
Phosphatase, alkaline, from calf intestine (CIP)		
Phosphatase, alkaline from calf intestine (CIP) Grade I	100 mg	**A3907.0100**
Phosphatase, alkaline from calf intestine (CIP) Grade II	1 g	**A3810.0001**

dNTP

Ready to use molecular biology grade dNTP mixes and dNTP sets.

The dNTP mix is designed to save hands-on time for researchers and reduce the possibility of contamination by reducing pipetting. The dNTP solutions are also available in sets of four individual dNTPs, each 100 mM. Both are convenient for use in DNA polymerisation reactions, DNA labelling and sequencing processes.

- Available as pre-mixed 10 mM or 25 mM solutions, or as sets of individual 100 mM dNTP solutions
- Both pre-mixed and sets have been functionally tested in PCR
- Purity >99% by HPLC
- Supplied in solution at pH 7,3 - 7,5

Description	Pk	Cat. No.
dNTP mix, 10 mM of each dA, dC, dG, and dT, 2×500 µl	1.000 µl	**733-1363**
dNTP set, separate vials of dA, dC, dG, dT, each 100 mM, 4×250 µl	1 SET	**733-1364**
dNTP mix, 25 mM of each dA, dC, dG, and dT, 2×1 ml	2.000 µl	**733-1854**
dNTP set, separate vials of dA, dC, dG, dT, each 100 mM, 16×250 µl	1 SET	**733-1855**

Betaine Enhancer, 5 M (5X)

Betaine Enhancer is especially effective when used with high GC-rich regions or templates with a high degree of secondary structures. It has a decreasing effect on the primer melting temperature.

Description	Pk	Cat. No.
5X Betaine Enhancer solution, 5 M, 5×1 ml	5 ml	**733-1361**

RT-PCR beads, illustra™ Ready-To-Go™

GE Healthcare

illustra™ RT-PCR is commonly used to amplify cDNA by combining first-strand cDNA synthesis of an RNA template with PCR amplification. Typically the reaction is performed in two steps. A first-strand cDNA reaction is performed, the resulting cDNA is then transferred to another tube containing *Taq* DNA polymerase and PCR buffer where the reaction mixture is subjected to multiple cycles of denaturation, annealing and elongation, resulting in the exponential amplification of the target cDNA. Ready-To-Go™ RT-PCR beads simplify this process to a single tube, single reaction procedure.

Ready-To-Go™ RT-PCR beads have been optimised for RT-PCR. Each room-temperature-stable bead contains M-MuLV Reverse Transcriptase, RNase inhibitor, buffer, nucleotides and *Taq* DNA polymerase. The only additional reagents required are water, template RNA, and primers.

The Ready-To-Go™ bead format significantly reduces the number of pipetting steps, thereby increasing reproducibility of the RT-PCR technique and minimising risk of contamination and RNA degradation. Ready-To-Go™ RT-PCR beads are provided in either thin walled 0,5 ml or 0,2 ml tubes compatible with most thermocyclers. The 0,2 ml tubes come assembled in a 96-well (8×12) plate format that allows individual strips of eight tubes to be easily removed. This flexibility allows use of either the entire 96-well plate, strips of eight or individual 0,2 ml tubes.

- Pre-dispensed, single dose, ambient-temperature-stable beads ensure greater reproducibility between reactions, minimise pipetting steps and reduce the potential for pipetting errors and contamination
- Optimised as a one-tube, one-step RT-PCR reaction for both cDNA synthesis and PCR using only one buffer and primer set - no need to open the tube or change conditions between steps
- Each lot of RT-PCR beads is function tested for its ability to generate highly specific PCR products to ensure lot-to-lot reproducibility

Delivery information: Each package of Ready-To-Go™ RT-PCR beads contains RT-PCR beads, control reactions and pd$(N)_6$ and oligo(dT) cDNA primers.

Description	Pk	Cat. No.
illustra™ Ready-To-Go™ RT-PCR beads (0,2 ml hinged tubes with cap)	96 Tests	**27-9259-01**
illustra™ Ready-To-Go™ RT-PCR beads (0,2 ml tubes)	96 Tests	**27-9267-01**
illustra™ Ready-To-Go™ RT-PCR beads (0,5 ml tubes)	100 Tests	**27-9266-01**

Masterscript RT-PCR System
5 PRIME

The Masterscript RT-PCR system is designed to offer maximum flexibility with just one kit: First strand cDNA synthesis, one-step RT-PCR and two-step RT-PCR. The PCR enzyme mix is a blend of DNA polymerases with a high extension rate and a DNA polymerase with proofreading function. In combination with the tuning buffer, the Masterscript PCR enzyme mix guarantees robust amplification of very long cDNAs with high fidelity.

- High yield reverse transcription and optimised PCR reaction
- Proofreading PCR enzyme mix for long-range RT-PCR up to 12 kb
- Minimal optimisation with self adjusting Mg^{2+} buffer technology
- Complete kit with Stop RNase inhibitor and dNTPs

Kit comprises: Masterscript RT enzyme (15 U/µl), Masterscript PCR enzyme mix (5 U/µl), RT-PCR buffer (with Mg^{2+}), Stop RNase inhibitor solution, 10X tuning buffer (with Mg^{2+}), dNTP mix, and RNase-free water.

Description	Pk	Cat. No.
Masterscript RT-PCR system	20 Tests	**733-0110**
Masterscript RT-PCR system	100 Tests	**733-0998**

Next generation sequencing, PerfeCTa® NGS Quantification kit
Quanta Biosciences

Accurate quantification of the number of amplifiable library molecules is the most critical step in the NGS workflow in obtaining high quality read data with next generation sequencing technologies. PerfeCta® NGS Quantification kits use Real-Time PCR with prediluted standards for the convenient and accurate quantification of NGS libraries for the Ion Torrent™ or Illumina® NGS platforms.

- Accurate and sensitive method for NGS library quantification
- Stabilised, prediluted standards for convenient use
- Consistency across a broad range of samples
- Sensitivity of detection to quantify low concentration libraries
- Quantification for either Illumina® or Ion Torrent™

Description	Pk	Cat. No.
Perfecta® NGS Quantification Kit - Ion Torrent™	1 KIT	**733-2297**
Perfecta® NGS Quantification Kit - Ion Torrent™/ROX	1 KIT	**733-2298**
Perfecta® NGS Quantification Kit - Ion Torrent™/Low ROX	1 KIT	**733-2299**
Perfecta® NGS Quantification Kit - Illumina®	1 KIT	**733-2300**
Perfecta® NGS Quantification Kit - Illumina®/ROX	1 KIT	**733-2301**
Perfecta® NGS Quantification Kit - Illumina®/Low ROX	1 KIT	**733-2302**

cDNA Synthesis Kits, qScript™
Quanta Biosciences

qScript™ cDNA Synthesis Kit contains qScript™ Reverse Transcriptase, a mixture of a MMLV reverse transcriptase derivative and ribonuclease inhibitor protein, optimised for sensitive and reliable cDNA synthesis over a broad dynamic range of input RNA. cDNA synthesis reagents are provided in a variety of SuperMix and kit formats to suit specific applications.

qScript™ cDNA SuperMix

qScript™ cDNA SuperMix is an easy to use solution for 2-step RT-PCR. This one-tube supermix contains all components for cDNA synthesis including buffer, dNTPs, $MgCl_2$, primers, RNase inhibitor, qScript™ Reverse Transcriptase and stabilisers. Only RNA needs to be added. Complete cDNA synthesis is achieved in 40 minutes. Consistency and reproducibility are achieved over a broad dynamic range regardless of RNA input. In addition, qScript™ cDNA SuperMix offers excellent sensitivity and accurate representation of low abundance genes. The supermix format eliminates multiple component additions providing exceptional reproducibility and precision. qScript™ cDNA SuperMix is available in both single tube or 96-well format.

qScript™ cDNA Synthesis Kit

qScript™ cDNA Synthesis Kit is a sensitive and easy to use kit for RNA quantification using two-step RT-PCR. This kit contains an optimised blend of random and oligo (dT) primers for robust, consistent and unbiased first-strand synthesis over a broad range of RNA template concentrations. The qScript™ Reaction Mix (5X) contains all required reagents for cDNA synthesis, except for qScript™ Reverse Transcriptase and RNA. qScript™ Reverse Transcriptase is provided in a separate tube. This kit is intended for use by researchers using Bio-Rad iScript™ cDNA Synthesis Kit for ongoing studies or established Standard Operating Procedures that cannot readily be switched to qScript™ cDNA SuperMix.

qScript™ Flex cDNA Kit

qScript™ Flex cDNA Kit is an easy to use format for first-strand cDNA synthesis that supports multiple RNA priming strategies. The qScript™ Flex reaction mix (5X) is optimised for use with oligo dT, random or gene specific primers in any combination. A proprietary cDNA-priming enhancer that improves sensitivity is provided pre-mixed with random and oligo dT primers, and in a separate tube for use with gene specific primers (user provided). qScript™ Reverse Transcriptase is provided in a separate tube.

- Supermix format ideal for high throughput applications
- Unbiased representation gives confidence that RNA is represented accurately in the resulting cDNA
- Broad dynamic range ensures data from precious samples is more reliably attained
- Choice of priming methods to suit individual needs

Description	Pk	Cat. No.
qScript™ cDNA SuperMix, 25 reactions	25 Assays	**733-1176**
qScript™ cDNA SuperMix, 100 reactions	100 Assays	**733-1177**
qScript™ cDNA SuperMix, 500 reactions	500 Assays	**733-1178**

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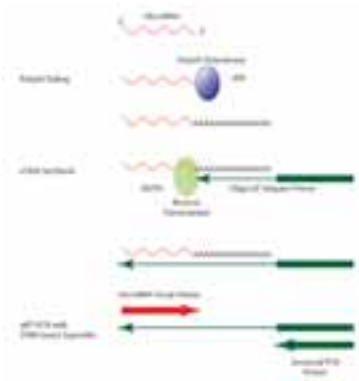
Description	Pk	Cat. No.
qScript™ cDNA Synthesis Kit, 25 reactions	25 Assays	**733-1173**
qScript™ cDNA Synthesis Kit, 100 reactions	100 Assays	**733-1174**
qScript™ cDNA Synthesis Kit, 500 reactions	500 Assays	**733-1175**
qScript™ Flex cDNA Kit, 25 reactions	25 Assays	**733-1180**
qScript™ Flex cDNA Kit, 100 reactions	100 Assays	**733-1181**

microRNA cDNA synthesis kit, qScript™

Quanta Biosciences



The qScript™ microRNA cDNA synthesis kit has been designed to convert miRNAs into cDNA starting from total RNA or RNA preparations pre-enriched for miRNAs. miRNAs are not polyadenylated in nature. With the qScript™ microRNA cDNA synthesis kit miRNAs are polyadenylated in a poly(A) polymerase reaction. qScript™ reverse transcriptase and other necessary reagents for cDNA synthesis are subsequently added to convert the poly(A) tailed microRNAs into cDNA using an oligo-dT adapter primer. The adapter primer has a unique sequence at its 5' end which allows amplification of cDNAs in Real-Time qRT-PCR reactions.

The kit comes complete with a Human Positive Control Primer that can be used to quantitate the small nucleolar RNA SNORD44 which is ubiquitously expressed in most human tissues. In addition, the kit contains 20% extra poly(A) tailing buffer and microRNA cDNA reaction mix to accommodate the use of no poly(A) polymerase and no reverse transcriptase control reactions.

Delivery information: Each kit contains poly(A) tailing buffer (5X), poly(A) polymerase, microRNA cDNA reaction mix, qScript™ reverse transcriptase, PerfeCTa® universal PCR primer, PerfeCTa® human positive control primer and nuclease-free water.

Description	Pk	Cat. No.
qScript™ microRNA cDNA synthesis kit, 25×20 µl reactions	25 Assays	**733-2013**
qScript™ microRNA cDNA synthesis kit, 100×20 µl reactions	100 Assays	**733-2014**

qScript™ One-Step qRT-PCR Kits

Quanta Biosciences

Synthesis of cDNA and PCR amplification are carried out in the same tube without opening between procedures. These kits are optimised to deliver maximum RT-PCR efficiency and specificity, enabling unbiased co-amplification of low copy transcripts in the presence of higher copy reference genes. As a result the qScript™ One-Step qRT-PCR Kits offer improved sensitivity over other commercially available qPCR reagents. The qScript™ One-Step Master Mix maximises the activities of both reverse transcriptase and PCR enzymes, while minimising primer-dimer formation. High specificity is assured with AccuStart™ *Taq* DNA Polymerase, which is bound by monoclonal antibodies for superior hot-start. Upon heating to 95 °C, the antibodies denature irreversibly releasing fully active and unmodified *Taq* DNA polymerase. qScript™ One-Step qRT-PCR Kits are available for all Real-Time PCR instrument platforms, including those requiring normalisation with ROX reference dye.

- Broad dynamic range ensures reliable data
- Highly sensitive for low copy RNA quantification
- Unbiased duplex amplification for more accurate results
- Simple, fast protocol with less variability

Description	Pk	Cat. No.
qScript™ One-Step qRT-PCR Kits, without passive reference dye		
qScript™ One-Step qRT PCR Kit, without passive reference dye, 50 reactions	50 Assays	**733-1256**
qScript™ One-Step qRT PCR Kit, without passive reference dye, 200 reactions	200 Assays	**733-1257**
qScript™ One-Step qRT-PCR Kits, ROX		
qScript™ One-Step qRT PCR Kit, with ROX, 50 reactions	1 KIT	**733-1258**
qScript™ One-Step qRT PCR Kit, with ROX, 200 reactions	1 KIT	**733-1259**
qScript™ One-Step qRT-PCR Kits, low ROX		
qScript™ One-Step qRT PCR Kit, with low ROX, 50 reactions	1 KIT	**733-1260**
qScript™ One-Step qRT PCR Kit, with low ROX, 200 reactions	1 KIT	**733-1261**

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One-Step Fast and Fast MGB qRT-PCR Kits, qScript™

Quanta Biosciences

These kits offer a convenient and highly sensitive solution for Real-Time reverse transcriptase PCR (qRT-PCR) of RNA templates using hybridisation probe detection chemistries, such as TaqMan® 5′-hydrolysis probes.

For Minor Groove Binder (MGB) modified probes, qScript™ One-Step Fast MGB qRT-PCR Kits are recommended. These kits offer a convenient and highly sensitive solution for qRT-PCR of RNA templates using TaqMan-MGB 5′-hydrolysis probe detection exclusively on qRT-PCR instrument platforms.

The system allows cDNA synthesis and PCR amplification to be carried out in the same tube. It is ideal for highly sensitive quantification of RNA viruses or low abundance RNA targets, as well as high throughput gene expression studies. It has also been optimised to deliver maximum RT-PCR efficiency, sensitivity, and specificity in reduced reaction volumes and fast cycle times.

One-step fast master mixes are provided as a 4X concentrated solution to allow addition of higher amounts of RNA template and improved detection sensitivity with low concentration samples. The unique formulation maximises the activities of both reverse transcriptase and *Taq* DNA polymerase while minimising the potential for primer-dimer and other non specific PCR artifacts. This enables unbiased co-amplification of low copy transcripts in the presence of higher copy reference genes in duplexed qRT-PCR applications.

Highly specific amplification is crucial to successful qRT-PCR, as non specific product(s) can compete for amplification of the target sequence and impair PCR efficiency. A key component of these kits is AccuStart™ *Taq* DNA Polymerase with monoclonal antibodies that bind to the polymerase and keep it inactive during reaction assembly and the 50 °C reverse transcription step. A brief 30 second heat activation step at 95 °C irreversibly denatures the antibodies, releasing fully active, unmodified *Taq* DNA polymerase. Rapid recovery of fully active, unmodified *Taq* DNA polymerase is critical for efficient extension kinetics. Therefore, these kits afford greater reagent economy and laboratory throughput on conventional or fast qPCR systems.

Ordering information: Kits are available for all Real-Time PCR instrument platforms including those requiring normalisation with ROX reference dye. If not using Minor Groove Binder (MGB) modified probes exclusively, qScript™ One-Step Fast qRT-PCR kits are recommended.

Description	Pk	Cat. No.
One-Step Fast qRT-PCR Kits without passive reference dye		
One-Step Fast qRT-PCR Kit, 100 reactions	100 Assays	**733-1900**
One-Step Fast qRT-PCR Kit, 500 reactions	500 Assays	**733-1901**
One-Step Fast qRT-PCR Kits with ROX		
One-Step Fast qRT-PCR Kit with ROX, 100 reactions	100 Assays	**733-1902**
One-Step Fast qRT-PCR Kit with ROX, 500 reactions	500 Assays	**733-1903**
One-Step Fast qRT-PCR Kits with low ROX		
One-Step Fast qRT-PCR Kit with low ROX, 100 reactions	100 Assays	**733-1904**
One-Step Fast qRT-PCR Kit with low ROX, 500 reactions	500 Assays	**733-1905**
One-Step Fast MGB qRT-PCR Kits without passive reference dye		
One-Step Fast MGB qRT-PCR Kit, 100 reactions	100 Assays	**733-1906**
One-Step Fast MGB qRT-PCR Kit, 500 reactions	500 Assays	**733-1907**
One-Step Fast MGB qRT-PCR Kits with ROX		
One-Step Fast MGB qRT-PCR Kit with ROX, 100 reactions	100 Assays	**733-1908**
One-Step Fast MGB qRT-PCR Kit with ROX, 500 reactions	500 Assays	**733-1909**
One-Step Fast MGB qRT-PCR Kits with low ROX		
One-Step Fast MGB qRT-PCR Kit with low ROX, 100 reactions	100 Assays	**733-1910**
One-Step Fast MGB qRT-PCR Kit with low ROX, 500 reactions	500 Assays	**733-1911**

PerfeCTa® qPCR FastMix™ Reaction Mixes

Quanta Biosciences

FastMixes include buffers and stabilisers optimised for maximum PCR efficiency, reproducibility, and sensitivity with TaqMan® and TaqMan® MGB probe chemistries. A key component of PerfeCTa® qPCR FastMixes is AccuFast™ *Taq* DNA polymerase that enables instant activation and rapid polymerisation kinetics. Upon heat activation (20 seconds at 95 °C), the antibodies irreversibly denature releasing fully active, unmodified *Taq* DNA polymerase. This promotes specific and efficient primer extension with the convenience of room temperature reaction assembly. FastMixes deliver maximum PCR efficiency, sensitivity, specificity, and a robust fluorescent signal with either fast or conventional cycling conditions.

Description	Pk	Cat. No.
PerfeCTa® qPCR FastMixes™ without passive reference dye		
FastMix™ without reference dye, 250 reactions	250 Assays	**733-1393**
FastMix™ without reference dye, 1250 reactions	1.250 Assays	**733-1394**
FastMix™ without reference dye, 5000 reactions	5.000 Assays	**733-1395**
PerfeCTa® qPCR FastMixes™ with ROX reference dye		
FastMix™ with ROX, 250 reactions	1 KIT	**733-1397**
FastMix™ with ROX, 1250 reactions	1 KIT	**733-1398**
FastMix™ with ROX, 5000 reactions	1 KIT	**733-1399**
PerfeCTa® qPCR FastMixes™ with low ROX reference dye		
FastMix™ with low ROX, 250 reactions	1 KIT	**733-1401**
FastMix™ with low ROX, 1250 reactions	1 KIT	**733-1402**
FastMix™ with low ROX, 5000 reactions	1 KIT	**733-1403**

qPCR SuperMixes, PerfeCTa®
Quanta Biosciences

PerfeCTa® qPCR SuperMixes are 2X concentrated, ready to use reaction cocktails containing all components except primers, probe and template for qPCR. These SuperMixes include buffers and stabilisers optimised for maximum PCR efficiency, reproducibility and sensitivity with TaqMan® and TaqMan® MGB probe chemistries. The enhanced specificity of PerfeCTa® qPCR SuperMixes suppresses cross reactivity between homologous sequences, improving detection and discrimination in SNP applications. A key component is AccuStart™ *Taq* DNA polymerase that contains monoclonal antibodies, which bind and inactivate the polymerase prior to the initial PCR denaturation step. Upon heat inactivation (2 minutes at 95 °C) the antibodies irreversibly denature releasing fully active, unmodified *Taq* DNA polymerase. This promotes specific and efficient primer extension with the convenience of room temperature reaction assembly. Perfecta® qPCR SuperMixes are formulated with and without reference dye to provide compatibility with specific Real-Time qPCR instruments. UNG versions include uracil DNA glycosylase.

- Broad dynamic range for greater reliability
- Superior antibody mediated hot start enables higher specificity leading to more accurate quantification

Sample kits are available, please enquire.

Description	Pk	Cat. No.
PerfeCTa® qPCR SuperMixes without passive reference dye		
SuperMix without reference dye, 100 reactions	1 KIT	**733-1183**
SuperMix without reference dye, 500 reactions	1 KIT	**733-1184**
SuperMix without reference dye, 2000 reactions	1 KIT	**733-1185**
PerfeCTa® qPCR SuperMixes with low ROX reference dye		
SuperMix with low ROX, 100 reactions	1 KIT	**733-1191**
SuperMix with low ROX, 500 reactions	1 KIT	**733-1192**
SuperMix with low ROX, 2000 reactions	1 KIT	**733-1193**
PerfeCTa® qPCR SuperMixes with ROX reference dye		
SuperMix with ROX, 100 reactions	1 KIT	**733-1187**
SuperMix with ROX, 500 reactions	1 KIT	**733-1188**
SuperMix with ROX, 2000 reactions	1 KIT	**733-1189**
PerfeCTa® qPCR SuperMixes with UNG		
SuperMix with UNG, 100 reactions	1 KIT	**733-1275**
SuperMix with UNG, 500 reactions	1 KIT	**733-1276**
SuperMix with UNG, 2000 reactions	1 KIT	**733-1277**
PerfeCTa® qPCR SuperMixes with UNG and low ROX		
SuperMix with UNG and low ROX, 100 reactions	1 KIT	**733-1283**
SuperMix with UNG and low ROX, 500 reactions	1 KIT	**733-1284**
SuperMix with UNG and low ROX, 2000 reactions	1 KIT	**733-1285**
PerfeCTa® qPCR SuperMixes with UNG and ROX		
SuperMix with UNG and ROX, 100 reactions	1 KIT	**733-1279**
SuperMix with UNG and ROX, 500 reactions	1 KIT	**733-1280**
SuperMix with UNG and ROX, 2000 reactions	1 KIT	**733-1281**

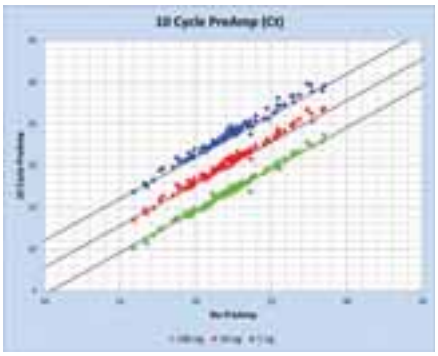
qPCR SuperMix, PerfeCTa® MultiPlex
Quanta Biosciences

This SuperMix is a 2X concentrated, ready to use reaction cocktail for Real-Time qPCR that contains all components, except primers, probes, and templates. The system transcends multiplex limitations of conventional PCR master mixes, enabling unbiased amplification of up to five target sequences in a single tube. Suppression of low copy amplicons by high copy reference targets in the amplification is a common problem in multiplex PCR. This can skew, or mask the apparent representation and quantification of low copy target sequences. PerfeCTa® MultiPlex qPCR SuperMix delivers dynamic range and sensitivity to multiplexed qPCR that is comparable to that for singleplex qPCR probe assays without the need for limiting or variable primer concentrations.

A key component of this supermix is AccuStart™ *Taq* DNA polymerase with monoclonal antibodies that bind to the polymerase and keep it inactive prior to the initial PCR denaturation step. Upon heat activation (2 minutes at 95 °C), the antibodies denature irreversibly, releasing fully active, unmodified *Taq* DNA polymerase. This enables specific and efficient primer extension with the convenience of room temperature reaction assembly.

Description	Pk	Cat. No.
qPCR SuperMix, 50 reactions	50 Assays	**733-1272**
qPCR SuperMix, 200 reactions	200 Assays	**733-1273**
qPCR SuperMix, 1000 reactions	1.000 Assays	**733-2074**

PerfeCTa® PreAmp 5X SuperMix
Quanta Biosciences



PerfeCTa® PreAmp SuperMix is a 5X concentrated, ready to use reaction cocktail for unbiased, selected enrichment of target sequences from limited amounts of starting material for downstream gene expression profiling or targeted resequencing. It contains all components, except primers and templates. The 5X concentrated SuperMix allows addition of higher template volumes when working with low concentration samples, and/or reduced reaction volumes. Inclusion of an inert light blue tracer dye helps visualise small reaction volumes and ensure accurate pipetting.

PerfeCta® PreAmp SuperMix delivers unbiased pre-amplification of up to 100 target sequences from as little as 100 pg of total RNA. It is compatible with both TaqMan® 5'-nuclease probes as well as ds-DNA binding dye (i.e. SYBR® Green I) qPCR detection chemistries.

A key component of PerfeCTa® PreAmp SuperMix is an ultra-pure, highly processive thermostable DNA polymerase that is combined with high avidity monoclonal antibodies. This proprietary polymerase mix is resistant to PCR inhibitors and provides an extremely stringent automatic hot start allowing reaction assembly, and temporary storage, at room temperature prior to pre-amplification.

Delivery information: Each kit contains 5X reaction buffer containing optimised concentrations of $MgCl_2$, dNTPs (dATP, dCTP, dGTP, dTTP), hot start DNA polymerase, AccuVue™ blue tracer dye, and stabilisers.

Description	Pk	Cat. No.
PerfeCTa® PreAmp 5X SuperMix, 40×50 µl reactions	40 Assays	**733-2265**

PerfeCTa® qPCR ToughMix®
Quanta Biosciences

PerfeCTa® qPCR ToughMix® is a 2X concentrated ready to use reaction cocktail for PCR amplification of DNA templates that overcomes many known inhibitors of PCR often present in crude samples extracted from environmental specimens, plant tissues, or animal tissues. It is a versatile and robust Real-Time qPCR reagent that provides maximum sensitivity and PCR efficiency with a variety of fluorogenic probe chemistries, including TaqMan® hydrolysis probes. PerfeCTa® qPCR ToughMix® contains all required reaction components, except primers, probe(s) and DNA template. The light blue colour of the AccuVue™ tracer dye simplifies reaction assembly in white, or clear plates and helps to minimise pipetting or mixing errors. It does not interfere with qPCR performance or affect the stability of the product.

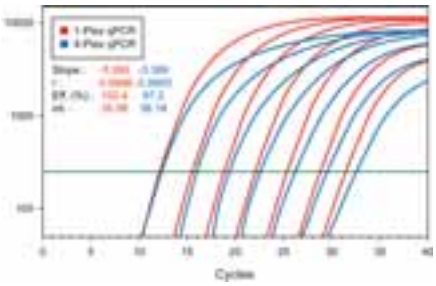
A key component of PerfeCTa® qPCR ToughMix® is an ultra-pure, highly processive thermostable DNA polymerase that is combined with high avidity monoclonal antibodies. This proprietary polymerase mix is highly resistant to PCR inhibitors and provides an extremely stringent automatic hot start allowing reaction assembly, and temporary storage, at room temperature prior to PCR amplification. PerfeCTa® qPCR ToughMix® delivers exceptional performance with either fast or conventional PCR cycling protocols.

Delivery information: Kits are available with or without ROX reference dye. All kits include 2X reaction buffer containing optimised concentrations of $MgCl_2$, dNTPs (dATP, dCTP, dGTP, dTTP), hot start DNA polymerase, AccuVue™ blue qPCR dye, and stabilisers. UNG versions include uracil DNA glycosylase.

Description	Pk	Cat. No.
PerfeCTa® qPCR ToughMix® without ROX		
PerfeCTa® qPCR ToughMix®, 250×20 µl reactions (2×1,25 ml)	250 Assays	**733-2092**
PerfeCTa® qPCR ToughMix®, 1250×20 µl reactions (10×1,25 ml)	1.250 Assays	**733-2090**
PerfeCTa® qPCR ToughMix®, 5000×20 µl reactions (1×50 ml)	5.000 Assays	**733-2091**
PerfeCTa® qPCR ToughMix® with ROX		
PerfeCTa® qPCR ToughMix®, ROX, 250×20 µl reactions (2×1,25 ml)	250 Assays	**733-2095**
PerfeCTa® qPCR ToughMix®, ROX, 1250×20 µl reactions (10×1,25 ml)	1.250 Assays	**733-2093**
PerfeCTa® qPCR ToughMix®, ROX, 5000×20 µl reactions (1×50 ml)	5.000 Assays	**733-2094**
PerfeCTa® qPCR ToughMix® with low ROX		
PerfeCTa® qPCR ToughMix®, low ROX, 250×20 µl reactions (2×1,25 ml)	250 Assays	**733-2098**
PerfeCTa® qPCR ToughMix®, low ROX, 1250×20 µl reactions (10×1,25 ml)	1.250 Assays	**733-2096**
PerfeCTa® qPCR ToughMix®, low ROX, 5000×20 µl reactions (1×50 ml)	5.000 Assays	**733-2097**
PerfeCTa® qPCR ToughMix® UNG without ROX		
PerfeCTa® qPCR ToughMix® UNG, 250×20 µl reactions (2×1,25 ml)	250 Assays	**733-2246**
PerfeCTa® qPCR ToughMix® UNG, 1250×20 µl reactions (10×1,25 ml)	1.250 Assays	**733-2243**
PerfeCTa® qPCR ToughMix® UNG, 5000×20 µl reactions (1×50 ml)	5.000 Assays	**733-2244**
PerfeCTa® qPCR ToughMix® UNG with ROX		
PerfeCTa® qPCR ToughMix® UNG, ROX, 250×20 µl reactions (2×1,25 ml)	250 Assays	**733-2250**
PerfeCTa® qPCR ToughMix® UNG, ROX, 1250×20 µl reactions (10×1,25 ml)	1.250 Assays	**733-2247**
PerfeCTa® qPCR ToughMix® UNG, ROX, 5000×20 µl reactions (1×50 ml)	5.000 Assays	**733-2248**
PerfeCTa® qPCR ToughMix® UNG with low ROX		
PerfeCTa® qPCR ToughMix® UNG, low ROX, 250×20 µl reactions (2×1,25 ml)	250 Assays	**733-2254**
PerfeCTa® qPCR ToughMix® UNG, low ROX, 1250×20 µl reactions (10×1,25 ml)	1.250 Assays	**733-2251**
PerfeCTa® qPCR ToughMix® UNG, low ROX, 5000×20 µl reactions (1×50 ml)	5.000 Assays	**733-2252**

PerfeCTa® MultiPlex qPCR ToughMix®

Quanta Biosciences



High efficiency, high sensitivity multiplex qPCR results with PerfeCta MultiPlex qPCR ToughMix

PerfeCTa® MultiPlex qPCR ToughMix® is a 5X concentrated, ready to use reaction cocktail for Real-Time quantitative PCR (qPCR) that overcomes many known inhibitors of PCR often present in crude samples extracted from environmental specimens, plant tissues, or animal tissues. It contains all components, except primers, probes and templates. The 5X concentrated ToughMix® allows addition of higher amounts of template and improved detection sensitivity with low concentration samples. PerfeCta® MultiPlex qPCR ToughMix® has been optimised to deliver maximum PCR efficiency, sensitivity, and specificity in reduced reaction volumes with fast cycle or conventional PCR cycling protocols.

- Tough tested - overcomes common inhibitors, including polysaccharides, heme/haemoglobin, humic acid, melanin
- Flexible - use fast or standard qPCR cycling conditions
- Broad dynamic range - reliable data from your precious samples every time

Description	Pk	Cat. No.
PerfeCTa® MultiPlex qPCR ToughMix®	250 Assays	**733-2324**
PerfeCTa® MultiPlex qPCR ToughMix®	1.000 Assays	**733-2322**
PerfeCTa® MultiPlex qPCR ToughMix®	5.000 Assays	**733-2323**
PerfeCTa® MultiPlex qPCR ToughMix®, with ROX	250 Assays	**733-2327**
PerfeCTa® MultiPlex qPCR ToughMix®, with ROX	1.000 Assays	**733-2325**
PerfeCTa® MultiPlex qPCR ToughMix®, with ROX	5.000 Assays	**733-2326**
PerfeCTa® MultiPlex qPCR ToughMix®, with low ROX	250 Assays	**733-2330**
PerfeCTa® MultiPlex qPCR ToughMix®, with low ROX	1.000 Assays	**733-2328**
PerfeCTa® MultiPlex qPCR ToughMix®, with low ROX	5.000 Assays	**733-2329**

PerfeCTa® qPCR FastMix® II

Quanta Biosciences

PerfeCTa® qPCR FastMix® II is an advanced qPCR reagent system for both fast and conventional PCR cycling protocols or instruments. It is a versatile and robust solution that provides the ultimate sensitivity and high PCR efficiency using a variety of fluorogenic probe chemistries, including TaqMan® hydrolysis probes. PerfeCTa® qPCR FastMix® II is provided as a 2X concentrated ready to use reaction cocktail that contains all required reaction components, except primers, probe(s), and DNA template. The light blue colour of the AccuVue™ tracer dye simplifies reaction assembly in white, or clear, plates and helps to minimise pipetting or mixing errors. It does not interfere with qPCR performance or affect the stability of the product.

A key component of PerfeCTa® qPCR FastMix® II is an ultra-pure, processive thermostable DNA polymerase that is free of detectable *E. coli* DNA. PerfeCTa® qPCR FastMix® II is ideal for demanding qPCR applications such as bacterial pathogen detection where residual host DNA in typical recombinant enzyme preparations can limit assay sensitivity and obscure detection of low copy samples. The enzyme in PerfeCTa® qPCR FastMix® II is combined with high avidity monoclonal antibodies to provide a stringent automatic Hot Start that allows reaction assembly, and temporary storage, at room temperature prior to PCR amplification.

Delivery information: Kits are available with or without ROX reference dye. All kits comprise of 2X reaction buffer containing optimised concentrations of $MgCl_2$, dNTPs (dATP, dCTP, dGTP, dTTP), Hot Start DNA polymerase, AccuVue™ blue qPCR dye, and stabilisers.

Description	Pk	Cat. No.
PerfeCTa® qPCR FastMix® II without ROX		
PerfeCTa® qPCR FastMix II®, 250×20 µl reactions (2×1,25 ml)	250 Assays	**733-2110**
PerfeCTa® qPCR FastMix II®, 1250×20 µl reactions (10×1,25 ml)	1.250 Assays	**733-2108**
PerfeCTa® qPCR FastMix II®, 5000×20 µl reactions (1×50 ml)	5.000 Assays	**733-2109**
PerfeCTa® qPCR FastMix® II with ROX		
PerfeCTa® qPCR FastMix II®, ROX, 250×20 µl reactions (2×1,25 ml)	250 Assays	**733-2113**
PerfeCTa® qPCR FastMix II®, ROX, 1250×20 µl reactions (10×1,25 ml)	1.250 Assays	**733-2111**
PerfeCTa® qPCR FastMix II®, ROX, 5000×20 µl reactions (1×50 ml)	5.000 Assays	**733-2112**
PerfeCTa® qPCR FastMix® II with low ROX		
PerfeCTa® qPCR FastMix II®, low ROX, 250×20 µl reactions (2×1.25 ml)	250 Assays	**733-2116**
PerfeCTa® qPCR FastMix II®, low ROX, 1250×20 µl reactions (10×1,25 ml)	1.250 Assays	**733-2114**
PerfeCTa® qPCR FastMix II®, low ROX, 5000×20 µl reactions (1×50 ml)	5.000 Assays	**733-2115**

qScript™ XLT One-Step RT-qPCR ToughMix®

Quanta Biosciences

qScript™ XLT One-Step RT-qPCR ToughMix® is a ready to use, highly sensitive master mix for reverse transcription quantitative PCR (RT-qPCR) of RNA templates.

qScript™ XLT One-Step RT-qPCR ToughMix® is a versatile and robust RT-qPCR reagent that provides maximum sensitivity and PCR efficiency with a variety of fluorogenic probe chemistries, including TaqMan® hydrolysis probes.

- Overcomes common inhibitors including polysaccharides, heme/haemoglobin, humic acid, melanin
- Suitable for fast or standard qPCR cycling conditions
- Broad dynamic range ensures reliable data from precious samples
- Multiplexing enabled - supports detection of up to four targets

Description	Pk	Cat. No.
One-Step RT-qPCR ToughMix®		
qScript™ XLT One-Step RT-qPCR ToughMix®, without passive reference dye, 100×20 µl reactions	100 Tests	**733-2161**
qScript™ XLT One-Step RT-qPCR ToughMix®, without passive reference dye, 500×20 µl reactions	500 Tests	**733-2230**
One-Step RT-qPCR ToughMix®, ROX		
qScript™ XLT One-Step RT-qPCR ToughMix®, with ROX, 100×20 µl reactions	100 Assays	**733-2162**
qScript™ XLT One-Step RT-qPCR ToughMix®, with ROX, 500×20 µl reactions	500 Assays	**733-2232**

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Description	Pk	Cat. No.
One-Step RT-qPCR ToughMix®, low ROX		
qScript™ XLT One-Step RT-qPCR ToughMix®, with low ROX, 100×20 µl reactions	100 Assays	**733-2163**
qScript™ XLT One-Step RT-qPCR ToughMix®, with low ROX, 500×20 µl reactions	500 Assays	**733-2234**

SuperMixes for Bio-Rad iQ™ and iScript™

Quanta Biosciences

Until recently, Quanta Biosciences developed and manufactured the complete range of Bio-Rad qPCR reagents, including all iScript™ cDNA synthesis kits and qPCR SuperMixes for SYBR® Green detection. The legacy formulations of Bio-Rad iQ™ SYBR® Green SuperMix and iScript™ one-step RT-PCR kit with SYBR® Green will continue to be available through VWR.

Description	Pk	Cat. No.
SuperMix SYBR® Green for iQ™, 100×50 µl reactions	1 KIT	**733-1530**
SuperMix SYBR® Green for iQ™, 500×50 µl reactions	1 KIT	**733-1531**
SuperMix SYBR® Green for iQ™, 2000×50 µl reactions	1 KIT	**733-1532**
SuperMix SYBR® Green for iScript™ 1-step RT-PCR, 50×500 µl reactions	1 KIT	**733-1534**
SuperMix SYBR® Green for iScript™ 1-step RT-PCR, 200×500 µl reactions	1 KIT	**733-1533**

PerfeCTa® SYBR® Green SuperMixes and FastMixes™

Quanta Biosciences

PerfeCTa® SYBR® Green SuperMixes and FastMixes™ enable efficient, sensitive and precise quantitative PCR with proprietary buffers and SYBR® Green stabilisers that maximise fluorescent signal, PCR efficiency, and reduce primer dimers. These SuperMixes and FastMixes™ have been optimised for all Real-Time PCR instrument platforms, including those requiring normalisation with ROX reference dye or fluorescein. UNG versions include uracil DNA glycosylase.

PerfeCTa® SYBR® Green SuperMixes are 2X concentrated, ready to use reaction cocktails containing all components for qPCR, except primers and template. A key component of these SuperMixes is AccuStart™ *Taq* DNA polymerase, which enables specific and efficient primer extension with the convenience of room temperature reaction assembly. AccuStart™ *Taq* DNA polymerase contains monoclonal antibodies that bind to the polymerase and keep it inactive prior to the initial PCR denaturation step. Upon heat activation the antibodies denature irreversibly, releasing fully active and unmodified *Taq* DNA polymerase.

PerfeCTa® SYBR® Green FastMixes™ are 2X concentrated, ready to use reaction mixes delivering maximum PCR efficiency, sensitivity, specificity and robust fluorescent signal using either fast or conventional cycling protocols. Rapid cycling is achieved by instant activation of AccuStart™ *Taq* DNA polymerase coupled with rapid polymerisation kinetics. High performance qPCR can be achieved in as little as 33 minutes.

- FastMixes™ offer shorter run times enabling more experiments per day
- Broad dynamic range ensures data from precious samples is more reliably attained
- Superior antibody-mediated hot start results in higher specificity leading to more accurate quantification
- Fast Cycling using existing primer sets means no re-optimisation and increased productivity

Description	Pk	Cat. No.
PerfeCTa™ SYBR® Green SuperMixes and FastMixes™ with ROX reference dye		
SuperMix, 100 reactions	100 Assays	**733-1249**
SuperMix, 500 reactions	500 Assays	**733-1250**
SuperMix, 2000 reactions	2.000 Assays	**733-1251**
SuperMix UNG, 100 reactions	100 Assays	**733-1295**
SuperMix UNG, 500 reactions	500 Assays	**733-1296**
SuperMix UNG, 2000 reactions	2.000 Assays	**733-1297**
FastMix™, 250 reactions	250 Assays	**733-1385**
FastMix™, 1250 reactions	1.250 Assays	**733-1386**
FastMix™, 5000 reactions	5.000 Assays	**733-1387**
PerfeCTa™ SYBR® Green SuperMixes and FastMixes™ with low ROX reference dye		
SuperMix, 100 reactions	100 Assays	**733-1253**
SuperMix, 500 reactions	500 Assays	**733-1254**
SuperMix, 2000 reactions	2.000 Assays	**733-1255**
SuperMix UNG, 100 reactions	100 Assays	**733-1299**
SuperMix UNG, 500 reactions	500 Assays	**733-1374**
SuperMix UNG, 2000 reactions	2.000 Assays	**733-1375**
FastMix™, 250 reactions	250 Assays	**733-1389**
FastMix™, 1250 reactions	1.250 Assays	**733-1390**
FastMix™, 5000 reactions	5.000 Assays	**733-1391**
PerfeCTa™ SYBR® Green SuperMixes and FastMixes™ with Fluorescein reference dye		
SuperMix, 100 reactions	100 Assays	**733-1195**
SuperMix, 500 reactions	500 Assays	**733-1196**
SuperMix, 2000 reactions	2.000 Assays	**733-1197**
SuperMix UNG, 100 reactions	100 Assays	**733-1287**
SuperMix UNG, 500 reactions	500 Assays	**733-1288**
SuperMix UNG, 2000 reactions	2.000 Assays	**733-1289**
FastMix™, 250 reactions	250 Assays	**733-1377**
FastMix™, 1250 reactions	1.250 Assays	**733-1378**
FastMix™, 5000 reactions	5.000 Assays	**733-1379**

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Description	Pk	Cat. No.
PerfeCTa™ SYBR® Green SuperMixes and FastMixes™ without passive reference dye		
SuperMix, 100 reactions	100 Assays	**733-1199**
SuperMix, 500 reactions	500 Assays	**733-1246**
SuperMix, 2000 reactions	2.000 Assays	**733-1247**
SuperMix UNG, 100 reactions	100 Assays	**733-1291**
SuperMix UNG, 500 reactions	500 Assays	**733-1292**
SuperMix UNG, 2000 reactions	2.000 Assays	**733-1293**
FastMix™, 250 reactions	250 Assays	**733-1381**
FastMix™, 1250 reactions	1.250 Assays	**733-1382**
FastMix™, 5000 reactions	5.000 Assays	**733-1383**

qPCR dye, EvaGreen®

Biotium

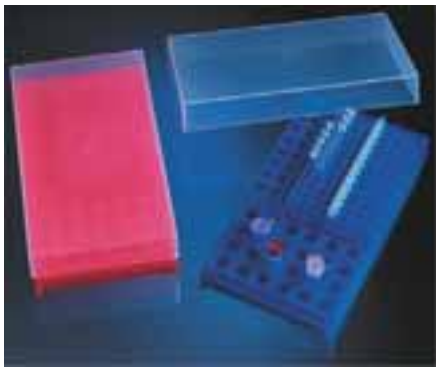
EvaGreen® qPCR dye is environmentally safe for easy handling and disposal down the drain.

- Unrivalled PCR signal strength
- Compatible with SYBR® green detection settings
- Compatible with fast cycling protocols
- Suitable for high resolution melt curve analysis*
- Thermally and hydrolytically stable

Description	Pk	Cat. No.
EvaGreen® dye, 20X in water, 5×1 ml	5 ml	**730-1415**

SYBR® is a registered trademark of Invitrogen, Inc.
*Practicing HRM may require a license from Idaho Technologies, Inc.

PCR workstation



PP, with clear lid

Ideal for preparing samples for cycling or working with completed procedures.

- Separate removable 96-well rack holds a plate, 0,2 ml tubes or 0,2 ml tube strips
- Additional wells on the workstation accommodate 0,5 ml, 1,5 ml or 2,0 ml tubes
- Autoclavable and freezable

Description	Pk	Cat. No.
PCR workstation	5	**732-0810**

PCR racks, reversible

PP, with lid

Designed to hold 0,2, 0,5, or 1,5 ml tubes.

- PCR side of the rack has 168 wells that can hold 8-well or 12-well tube strips or one 0,2 ml tube per well
- Opposite side of the rack has 40 wells that can hold 0,5 ml tubes
- Both sides of the rack have 12 wells that can hold 1,5 ml tubes
- Simple to use, removable hinged lid snaps in place on either side of the rack

Ordering information: Assorted pack includes one each of blue, green, purple, yellow and orange.

Description	Colour	Pk	Cat. No.
PCR rack	Assorted	5	**211-0198**

PCR box/rack
Brand

PP, assorted colours (red, yellow, green, purple, blue)

Suitable for sample preparation, for keeping and storing 0,2 ml single tubes, 8-strips and 12-strips, and 96-well PCR plates.

- Can be stacked without lids
- Able to withstand temperatures from –80 to +121 °C

Description	Colour	Pk	Cat. No.
PCR box/rack	Assorted	5	**731-1251**

PCR racks, 96-well
Heathrow Scientific

High resistance PP

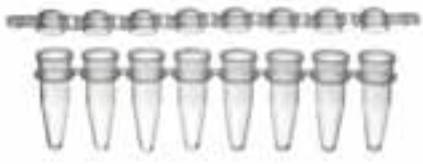
Designed to accommodate 96 individual 0,2 ml tubes or 12 or 8 strips of 8 or 12 tubes.

- Tube wells are easily identified by imprinted numbers and letters
- Removable, hinged lid

Colour: Natural, blue, green, yellow or assorted colours (one each of blue, green, pink, yellow and natural).

Description	Colour	Pk	Cat. No.
PCR rack, 96-well	Assorted	5	**211-3505**
PCR rack, 96-well	Natural	1	**211-3504**
PCR rack, 96-well	Blue	1	**211-3501**
PCR rack, 96-well	Green	1	**211-3502**

PCR tubes and strips, 0.2 ml



732-0546

732-0547

732-0548

PP

Designed to fit most popular brands of thermal cycler.

- Certified free from DNase, RNase and Human DNA
- Autoclavable
- Available with domed or flat caps

Description	Colour	Capacity (ml)	Pk	Cat. No.
PCR tubes				
Individual PCR tubes, with attached flat caps	Clear	0,2	1.000	**732-0548**
Individual PCR tubes, with attached domed caps	Clear	0,2	1.000	**732-0547**
8-tube strips for PCR, with individually attached domed caps	Clear	0,2	120	**732-0545**
8-tube strips for PCR, with attached domed cap strips	Clear	0,2	125	**732-0546**
12-tube strips for PCR, without caps	Clear	0,2	80	**732-0552**
12-tube strips for PCR, with separate domed cap strips	Clear	0,2	80	**732-0554**
qPCR tubes				
8-tube strips for qPCR with individually attached, optically clear, flat caps	Clear	0,2	120	**211-0338**
8-tube strips, low profile for qPCR with individually attached, optically clear, flat caps	Clear	0,2	120	**211-0339**
8-tube strips for qPCR with individually attached, optically clear, hinged flat caps	Clear	0,2	125	**211-0381**

Description	Pk	Cat. No.
Accessories		
Strip caps for 12-well, 0,2 ml PCR tube strips	80	**732-0553**

PCR tube strips, 0,2 ml, and cap strips

PP

Designed to fit most popular brands of thermal cycler.

- Certified free from DNase, RNase and Human DNA
- Available with domed or flat caps

Description	Colour	Pk	Cat. No.
Strips of 8 PCR tubes, without caps	Clear	125	**732-1517**
Strips of 8 PCR tubes, with detached flat cap strips	Clear	250	**732-1520**
Strips of 8 PCR tubes, with detached domed cap strips	Clear	250	**732-1521**
Strips of 8 PCR caps, domed	Clear	125	**732-1518**
Strips of 8 PCR caps, flat	Clear	125	**732-1519**

PCR microtubes and strips
Biotix

Medical grade virgin polypropylene

Superior clarity for sample visualisation.

- Excellent chemical and temperature resistance
- Biologically inert
- BioReady™ certified free from DNase, RNase and endotoxin

Description	Colour	Capacity (ml)	Packed	Pk	Cat. No.
Individual PCR tubes, flat cap	Clear	0,2	1000 tubes/pack	1.000	**732-2462**
8-strip PCR tubes, without caps	Clear	0,2	125 tubes/pack	125	**732-2463**
8-strip flat caps for PCR tubes	Clear	-	125 caps/pack	125	**732-2464**

PCR tubes without caps, 0,2 ml, Axygen®
Corning®

PP

Axygen® 0,2 ml polypropylene thin wall PCR tubes with flat caps are designed to fit standard 96-well blocks. Ultra-thin and consistent wall thickness allows precise thermal transfer and even insertion cap ensures a tight fit to prevent evaporation.

- Certified free from DNase and RNase
- Non pyrogenic
- Non sterile

Colour	Capacity (ml)	Pk	Cat. No.
Clear	0,2	1.000	**732-0886**

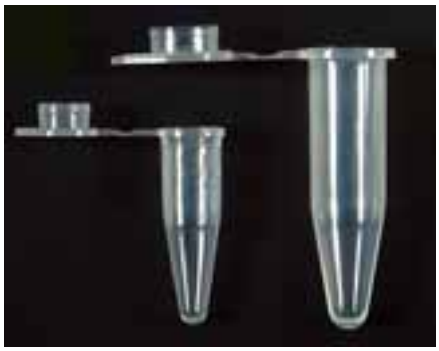
PCR microtubes with domed cap, Axygen®
Corning®

PP

- Domed caps for efficient heat transfer from thermal cycler lid
- Ultra-thin walls of uniform thickness optimise heat transfer
- Cap design ensures a tight fit and eliminates possibility of sample evaporation
- Certified free from DNase, RNase and endotoxin

Description	Colour	Pk	Cat. No.
PCR microtubes with domed cap, 0,2 ml	Assorted	1.000	**732-1034**
PCR microtubes with domed cap, 0,2 ml	Natural	1.000	**732-0676**

PCR microtubes with flat cap, Axygen®
Corning®

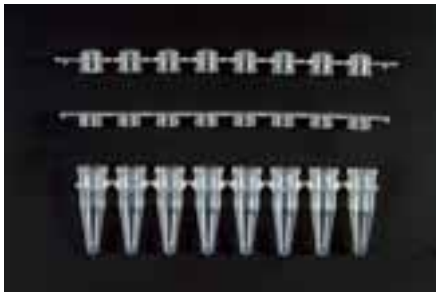


PP

- Ultra-thin walls of uniform thickness optimise heat transfer
- Cap design ensures a tight fit and eliminates possibility of sample evaporation
- Certified free from DNase, RNase and endotoxin

Description	Colour	Pk	Cat. No.
PCR microtubes with flat cap, 0,2 ml	Assorted	1.000	**732-1033**
PCR microtubes with flat cap, 0,2 ml	Natural	1.000	**732-0674**
PCR microtubes with flat cap, 0,5 ml	Assorted	1.000	**732-1035**
PCR microtubes with flat cap, 0,5 ml	Natural	1.000	**732-0675**

PCR microtube and cap strips, 0.2 ml, 8-strips, Axygen
Corning®



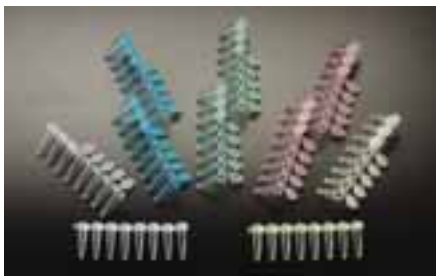
PP

Optical flat cap strips feature ultra-clear upper surfaces, ideal for fluorescent, luminescent, and Real-Time PCR applications.

- Ultra-thin walls of uniform thickness optimise heat transfer
- Tongue at the end of each strip for ease of handling
- Certified free from DNase, RNase and endotoxin

Description	Pk	Cat. No.
PCR microtube strips, 0,2 ml, 8 per strip, with cap strips	125	**732-0679**
PCR microtube strips, 0,2 ml, 8 per strip	125	**732-0678**
Domed cap strips for 0,2 ml PCR microtubes, 8 per strip	125	**732-0680**
Optical flat cap strips for 0,2 ml microtubes, suitable for qPCR, 8 per strip	125	**732-0681**

Strips of 8 PCR tubes with attached caps, 0,2 ml, Amplitube™



PP

This more convenient 0,2 ml tube strip incorporates individually attached caps. No need to carry two separate components in inventory. The strip includes 8 integral 0,2 ml tubes with ultra-thin sidewalls and bottoms for more uniform and efficient temperature transfer. This PCR reaction strip is available with either flat (needle pierceable) or dome-topped individually attached hinged caps. While easily opened and closed with one hand, their positive sealing will fully protect the contents from evaporation during the whole thermal cycle.

- Can be used with 8-channel hand-held pipettors
- Choice of colourless and four non-cytotoxic and non-metallic colours
- The cap has an integral seal preventing contamination with surface of lid

Colour	Capacity (ml)	Pk	Cat. No.
With flat caps			
Blue	0,2	125	**731-0434**
Green	0,2	125	**731-0435**
Natural	0,2	125	**731-0436**
Red	0,2	125	**731-0437**
Yellow	0,2	125	**731-0438**
With domed caps			
Blue	0,2	125	**731-0442**
Green	0,2	125	**731-0443**
Natural	0,2	125	**731-0444**
Red	0,2	125	**731-0445**
Yellow	0,2	125	**731-0446**

PCR tubes, 0.2 ml, with flat or domed cap, ABgene®
Thermo Scientific

PP

Suitable for 0,2 ml thermal cycler blocks.

- 0,25 ml maximum tube capacity when closed
- Integral snap-shut cap
- Available with flat or domed caps
- Certified free from DNase, RNase and Human DNA

Description	Colour	Packed	Pk	Cat. No.
Domed cap tubes	Clear	1000 tubes/pack	1.000	**732-4803**
Domed cap tubes	Assorted colours	1000 tubes/pack	1.000	**732-0452**
Flat cap tubes	Clear	1000 tubes/pack	1.000	**732-4836**
Flat cap tubes, sterile	Clear	1000 tubes/pack	1.000	**732-0073**
Flat cap tubes	Assorted colours	1000 tubes/pack	1.000	**732-0074**

PCR tubes, 0.5 ml, with flat or domed cap, ABgene®
Thermo Scientific

PP

Suitable for 0,5 ml thermal cycler blocks.

- 0,6 ml maximum tube capacity when closed
- Integral snap-shut cap
- Certified free from DNase, RNase and Human DNA

Description	Colour	Capacity (ml)	Packed	Pk	Cat. No.
Flat cap tubes	Clear	0,5	1000 tubes/pack	1.000	**732-4804**
Domed cap tubes	Clear	0,5	1000 tubes/pack	1.000	**732-0459**
Flat cap tubes	Assorted colours	0,5	1000 tubes/pack	1.000	**732-0061**
Domed cap tubes	Assorted colours	0,5	1000 tubes/pack	1.000	**732-0062**

8 and 12 flat cap strips, ABgene®
Thermo Scientific

PP

Suitable for use with 96-well PCR plates, as well as standard and low profile tube strips.

- Flat surface of each cap facilitates sample labelling
- Large labelled end tabs for strip orientation and removal (A-H for 8 strip, 1-12 for 12 strip)
- Certified free from DNase, RNase and Human DNA

Description	Colour	Packed	Pk	Cat. No.
Strips of 8 flat caps	Clear	10 packs of 12 strips	120	**732-4880**
Strips of 8 flat caps	Clear	250 strips	250	**732-4881**
Strips of 8 flat caps	Clear	25 packs of 12 strips	300	**732-4882**
Strips of 12 flat caps	Clear	25 packs of 8 strips	200	**732-4897**

8 and 12 domed cap strips, ABgene®
Thermo Scientific

PP

Suitable for use with 96-well PCR plates as well as standard and low profile tube strips.

- Large end tabs for strip removal
- Certified free from DNase, RNase and Human DNA

Description	Colour	Packed	Pk	Cat. No.
Strips of 8 domed caps	Clear	250 strips/pack	250	**732-4801**
Strips of 8 domed caps	Clear	10 packs of 12	120	**732-4806**
Strips of 8 domed caps	Clear	25 packs of 12	300	**732-4830**
Strips of 12 domed caps	Clear	10 packs of 8	80	**732-4898**
Strips of 12 domed caps	Clear	25 packs of 8	200	**732-4899**

PCR Thermo-Tube and cap strips, 0.2 ml, ABgene®

Thermo Scientific

PP

Ideal for use in 96-well V-bottom thermal cycler blocks.

- Strips of 8 and 12 tubes with or without cap strips
- Suitable for 0,2 ml thermal cycler blocks
- 0,25 ml maximum tube capacity when capped
- Can be cut into individual tubes
- Flat or domed cap strips available
- Certified free from DNase, RNase and Human DNA

Colour: Clear, unless otherwise stated. Other colours available on request.

Description	Colour	Capacity (ml)	Packed	Pk	Cat. No.
Strip tubes 0,2 ml					
Strips of 8 tubes	Clear	0,2	250 strips/pack	250	**732-4800**
Strips of 8 tubes	Blue	0,2	250 strips/pack	250	**732-0041**
Strips of 8 Tubes	Green	0,2	250 strips/pack	250	**732-0042**
Strips of 8 tubes	Purple	0,2	250 strips/pack	250	**732-0043**
Strips of 8 tubes	Red	0,2	250 strips/pack	250	**731-0252**
Strips of 8 tubes	White	0,2	250 strips/pack	250	**731-0253**
Strips of 8 tubes	Yellow	0,2	250 strips/pack	250	**732-0044**
Strips of 8 tubes	Clear	0,2	10 packs of 12	120	**732-4810**
Strips of 8 Thermo-tubes	Blue	0,2	10 packs of 12	120	**731-0268**
Strips of 8 Thermo-tubes	Green	0,2	10 packs of 12	120	**731-0269**
Strips of 8 Thermo-tubes	Purple	0,2	10 packs of 12	120	**731-0270**
Strips of 8 Thermo-tubes	Red	0,2	10 packs of 12	120	**731-0271**
Strips of 8 Thermo-tubes	Yellow	0,2	10 packs of 12	120	**731-0272**
Strips of 12 tubes	Clear	0,2	10 packs of 8	80	**732-4946**
Strip tubes 0,2 ml with caps					
Strips of 8 tubes and domed caps	Clear	0,2	250 strips/pack	250	**732-4802**
Strips of 8 tubes and domed caps	Blue	0,2	250 strips/pack	250	**731-0258**
Strips of 8 tubes and domed caps	Green	0,2	250 strips/pack	250	**731-0259**
Strips of 8 tubes and domed caps	Purple	0,2	250 strips/pack	250	**731-0260**
Strips of 8 tubes and domed caps	Red	0,2	250 strips/pack	250	**731-0261**
Strips of 8 tubes and domed caps	Yellow	0,2	250 strips/pack	250	**731-0262**
Strips of 8 tubes and domed caps	Assorted colours	0,2	250 strips/pack	250	**732-0059**
Strips of 8 Thermo-tubes and domed caps	Clear	0,2	10 packs of 12	120	**732-4809**
Strips of 8 Thermo-tubes and domed caps	Blue	0,2	10 pack s of 12	120	**731-0263**
Strips of 8 Thermo-tubes and domed caps	Green	0,2	10 packs of 12	120	**731-0264**
Strips of 8 Thermo-tubes and domed caps	Purple	0,2	10 packs of 12	120	**731-0265**
Strips of 8 Thermo-tubes and domed caps	Red	0,2	10 packs of 12	120	**731-0266**
Strips of 8 Thermo-tubes and domed caps	Yellow	0,2	10 packs of 12	120	**731-0267**
Strips of 8 tubes with flat caps	Clear	0,2	250 strips/pack	250	**732-0883**
Strips of 8 tubes and flat caps	Assorted colours	0,2	250 strips/pack	250	**731-0433**
Strips of 8 tubes and ultra clear cap strips	Clear	0,2	10 packs of 12	120	**732-0884**
Strips of 8 tubes and ultra clear cap strips	White	0,2	10 packs of 12	120	**732-0623**
Strips of 12 tubes and domed caps	Clear	0,2	10 packs of 8	80	**732-4947**
Strips of 12 tubes and flat caps	Clear	0,2	10 packs of 8	80	**732-4948**

PCR Thermo-Tube and cap strips, low profile, 0.2 ml, ABgene®

Thermo Scientific

PP

The low profile of these tubes decreases 'dead space' between the heated lid of the thermal cycler and the sample. This eliminates condensation on the side-wall of the tube, preventing reduction in PCR volume and increasing the efficiency of the reaction.

- Available as strips of 8 or 12 Thermo-Tubes, with or without flat or domed caps
- Suitable for 0,2 ml thermal cycler blocks
- Maximum tube capacity 0,15 ml when capped
- Labelled A to H end tabs (8-strip) and 1 to 12 (12-strip)
- Certified free from DNase, RNase and human genomic DNA

Colour: Clear, unless otherwise stated. Other colours available on request.

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Description	Colour	Capacity (ml)	Packed	Pk	Cat. No.
Strips of 8 low profile tubes	Clear	0,2	10 packs of 12	120	**732-4872**
Strips of 8 low profile tubes and domed caps	Clear	0,2	10 packs of 12	120	**732-4873**
Strips of 8 low profile tubes and flat caps	Clear	0,2	10 packs of 12	120	**732-4874**
Strips of 8 low profile tubes and flat caps	Clear	0,2	250 strips/pack	250	**732-4877**
Strips of 8 low profile tubes and domed caps	Assorted colours	0,2	250 strips/pack	250	**732-4878**
Strips of 12 low profile tubes	Clear	0,2	10 packs of 8	80	**732-4893**
Strips of 12 low profile tubes and domed caps	Clear	0,2	10 packs of 8	80	**732-4894**
Strips of 12 low profile tubes and flat caps	Clear	0,2	10 packs of 8	80	**732-4895**

PCR microtubes
Eppendorf

PP

These thin-walled, 0,2 ml PCR tubes are designed for use with all leading thermal cyclers.

- 0,2 ml tube has a contamination shield on the hinged lid
- Certified free from DNase, RNase and human genomic DNA

Colour: Clear

Description	Pk	Cat. No.
PCR microtubes, single, 0,2 ml	1.000	**732-0097**
PCR microtube strips, 0,2 ml, 8-tube strips with individually attached caps	120	**732-0098**

Single PCR tubes with attached caps
Brand

PP

These 0,2 ml and 0,5 ml PCR tubes with attached caps are compatible with leading thermal cyclers with heated lids.

- Unique cap design closes and opens easily without tools, yet ensures a tight fit to reduce sample evaporation
- Flat caps allow simple labelling
- Free from DNase, RNase and DNA
- Autoclavable 121 °C (20 min)

Colour: Clear

Description	Pk	Cat. No.
PCR microtubes with attached domed cap, 0,2 ml	1.000	**211-3260**
PCR microtubes with attached flat cap*, 0,2 ml	1.000	**211-3261**
PCR microtubes with attached flat cap*, 0,5 ml	1.000	**211-3262**

* Also available in rose, yellow, green or blue on request.

Strips of 8 PCR tubes with detached cap strips
Brand

PP

8 connected 0,2 ml tubes and domed or flat caps in strips of 8.

- Flat caps are suitable for Real-Time PCR (qPCR)
- Easy to open and close without tools
- The tubes have a holding strap at one end, and the cover strips have a small lip on the side of each cap for careful, contamination-free opening
- Free from DNase, RNase and DNA
- Autoclavable 121 °C (2 bar), acc. DIN EN 285

Colour: Clear

Description	Colour	Pk	Cat. No.
Strips of 8 PCR tubes*, 0,2 ml, without caps	Clear	125	**211-3263**
Strips of 8 PCR caps, flat	Clear	125	**731-1250**
Strips of 8 PCR caps, domed	Clear	125	**211-3265**

* Also available in rose, yellow, green or blue on request.

Strips of 8 PCR tubes with attached cap strips
Brand

PP

8 connected 0,2 ml tubes with attached domed cap strips.

- Domed caps facilitate one-handed operation
- Free from DNase, RNase and DNA
- Autoclavable at 121 °C (2 bar), acc. DIN EN 285

Colour: Clear

Description	Pk	Cat. No.
Strips of 8 PCR tubes with attached domed cap strips, 0,2 ml	125	**211-3264**

Strips of 8 PCR tubes with attached flat individual caps
Brand

PP

Eight connected 0,2 ml or 0,15 ml PCR tubes with attached, flat individual caps.

- Cap offers ideal protection against contamination
- Highly transparent cap makes them ideal for Real-Time PCR (qPCR)
- Available in standard or low profile versions
- Free from DNase, RNase and DNA
- Autoclavable 121 °C (2 bar), acc. DIN EN 285

Colour: Transparent or white

Description	Colour	Capacity (ml)	Pk	Cat. No.
PCR tube strips with standard individual flat caps	Clear	0,2	120	**211-2613**
PCR tube strips with low profile individual flat caps	Clear	0,15	120	**211-2614**

PCR plates, 96-well

732-2387

732-2386

732-2388

PP

These PCR plates are compatible with most thermal cyclers, including the Applied Biosystems 9600 and 9700, and the MJ Research PTC-100, and are ideal for high throughput screening thermal cycler applications.

- Smooth, thin, uniform well walls ensure accurate thermal transfer
- Plates are thin, flexible and easy to cut
- Certified free from DNase, RNase and human genomic DNA
- Printed alphanumeric labelling and cut corner simplifies plate orientation and sample identification

Working capacity: 200 µl

Description	Colour	Pk	Cat. No.
96-well PCR plates, flat			
96-well PCR plates, standard profile, non-skirted	Clear	100	**732-2387**
96-well PCR plates, flat	Blue	100	**211-0264**
96-well PCR plates, flat	Green	100	**211-0265**
96-well PCR plates, flat	Purple	100	**211-0266**
96-well PCR plates, flat	Red	100	**211-0267**
96-well PCR plates, flat	Yellow	100	**211-0268**
96-well PCR plates, flat	Assorted	100	**211-0263**
96-well PCR plates, low profile			
96-well PCR plates, low profile, non-skirted	Clear	100	**732-2386**
96-well PCR plates, skirted			
96-well PCR plates, fully skirted	Clear	100	**211-0297**
96-well PCR plates, skirted	Blue	100	**211-0300**
96-well PCR plates, skirted	Green	100	**211-0301**
96-well PCR plates, skirted	Purple	100	**211-0302**
96-well PCR plates, skirted	Red	100	**211-0303**
96-well PCR plates, skirted	Yellow	100	**211-0304**
96-well PCR plates, skirted	Assorted	100	**211-0298**
96-well PCR plates, raised well			
96-well PCR plates, raised well	Clear	100	**211-0269**
96-well PCR plates, half-skirted			
96-well PCR plates, half-skirted	Clear	100	**732-2390**
96-well PCR plates, low profile, half-skirted			
96-well PCR plates, low profile, half-skirted	Clear	100	**732-2388**
96-well PCR plates, low profile, half-skirted	Assorted	100	**211-0291**
96-well PCR plates, low profile, raised half-skirt			
96-well PCR plates, low profile, raised half-skirted	Clear	100	**732-2389**

Description	Pk	Cat. No.
Accessories		
Strips of 8 PCR caps, domed	125	**732-1518**
Strips of 8 PCR caps, flat	125	**732-1519**
8-cap strips for PCR plates (except 732-2386, 732-2387, 732-2388, 732-2389, 732-2390)	125	**732-0550**

qPCR plates, 96-well

PP

These white PCR plates and optically clear cap closures are suitable for Real-Time PCR applications. White qPCR plates are designed to enable sensitive and accurate fluorenscence detection. When used with together with the ultra-clear caps or optical seals, these products will increase sensitivity and reduce variablility in qPCR assays.

- Smooth, thin, uniform well walls ensure accurate thermal transfer
- Wells are slightly raised to accept optically clear strip caps or sealing film
- Certified free from DNase, RNase and human genomic DNA

Working capacity: 200 µl

Description	Colour	Pk	Cat. No.
Flat plate for qPCR	White	100	**211-0313**
Half-skirted qPCR plate	White	100	**211-0315**
Skirted qPCR plate	White	100	**211-0317**

Description	Pk	Cat. No.
Accessories		
Optically clear 8-cap strips for Real-Time PCR plates	125	**211-0350**

PCR plates, 384-well

PP

These PCR plates are compatible with most thermal cyclers and are ideal for high throughput screening thermal cycler applications.

- Smooth, thin, uniform well walls ensure accurate thermal transfer
- Wells are slightly raised to accommodate sealing mats, films or foils
- Plates are skirted to allow barcoding and include a frosted labelling area
- Lot tested and certified free from DNase, RNase and human genomic DNA
- Printed alphanumeric labelling simplifies plate and sample identification

Working capacity: 25 µl

Description	Colour	Pk	Cat. No.
PCR plates, 384-well	Natural	100	**211-0305**

PCR plates, 96-well, segmented, Axygen®
Corning®

732-0663

PP plates, silicone mats

Designed to fit 0,2 ml thermal cycler blocks.

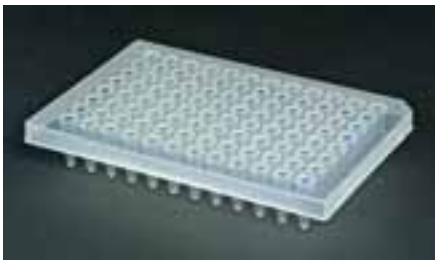
- Ultra-thin walls of uniform thickness accelerate heat transfer, leading to shorter cycle times and more consistent results
- Certified free from DNase, RNase and endotoxin for highest sample integrity
- AxyMat™ sealing mats autoclavable and reusable

Model	732-0663
Compatible with (in addition to standard thermal cycling)	BioRad iCycler, MyiQ, iQ5, Beckman CEQ sequencers
Total volume (µl)	320
Volume with Axymat (µl)	240
Working volume (µl)	280

Description	Colour	Pk	Cat. No.
96-well PCR plates, with segmented strips of 24 wells	Clear	10	**732-0663**

Description	Pk	Cat. No.
Accessories		
AxyMat™ sealing mat for 96-well PCR plates	10	**732-0668**

PCR plates, 96-well, half skirt, Axygen®
Corning®



PP plates, silicone mats

Designed to fit 0,2 ml thermal cycler blocks.

- Ultra-thin walls of uniform thickness accelerate heat transfer, leading to shorter cycle times and more consistent results
- Certified free from DNase, RNase and endotoxin for highest sample integrity
- AxyMat™ sealing mats autoclavable and reusable

Model	Half skirt, double notch corner	Half skirt, single notch corner
Compatible with (in addition to standard thermal cycling)	-	ABI Fast PCR 5700, 7000, 7700, BioRad iCycler, MyiQ, iQ5, ABI sequencers
Total volume (µl)	340	
Volume with Axymat (µl)	240	
Working volume (µl)	300	

Description	Colour	Pk	Cat. No.
96-well PCR plates, with half skirt, double notch corner	Clear	10	**731-1010**
96-well PCR plates, with half skirt, single notch corner	Clear	10	**732-0803**

Description	Pk	Cat. No.
Accessories		
AxyMat™ sealing mat for 96-well PCR plates	10	**732-0668**

PCR plates, 96-well, Thermowell® and Thermowell® GOLD
Corning®

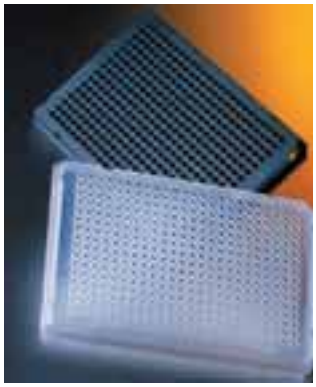
PP, non sterile

Compatible with a full range of PCR, sequencing and Real-Time PCR equipment.

Thermowell® GOLD 96-well PCR plates are available in different formats to ensure maximum flexibility and a perfect match for specific applications. The original Thermowell® 96-well PCR plates are universal fit and can be cut into 3×8-well segments.

Description	Pk	Cat. No.
Full skirt, clear, Thermowell® GOLD	50	**732-5590**
Half skirt, clear, Thermowell® GOLD	50	**732-5591**
Elevated skirt, clear, Thermowell® GOLD	50	**732-5592**
Half skirt, clear, with 2 barcode labels, Thermowell® GOLD	50	**734-4137**
Half skirt, natural, Thermowell®	25	**734-1766**

PCR plates, 384-well, Thermowell®
Corning®



PP, non sterile

Compatible with a full range of PCR, sequencing and Real-Time PCR equipment.

Thermowell® GOLD 384-well PCR plates feature exceptional dimensional stability following thermocycling, and are fully compatible with automation, commonly used thermal cyclers, and Applied Biosystems® sequencing adapters.

Description	Pk	Cat. No.
Clear, Thermowell® GOLD	50	**732-5595**
Clear, Thermowell® GOLD, with 2 generic barcode labels	50	**732-0488**
Black, Thermowell® GOLD	50	**732-5594**

PCR plates, 96-well, ABgene® SuperPlate™
Thermo Scientific

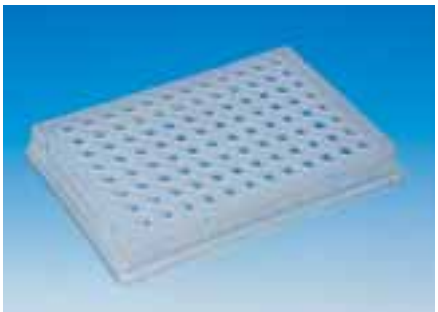
PP

The ABgene® SuperPlate™ provides four times more rigidity for superior robotic handling. Three versions are available, all with ultra-rigid SBS footprint for compatibility with automated systems, and thin walled round bottom wells for optimal heat transfer and maximum sample recovery.

- Enhanced thermal stability to minimise warping during thermal cycling and heat sealing
- Black lettering for quick referencing of wells
- Maximum well volume 0,2 ml when used with adhesive heat seals
- Skirted version is stackable and compatible with automated systems
- Available in white for qPCR applications

Description	Colour	Pk	Cat. No.
Raised semi-skirt	Blue	25	**732-1057**
Raised semi-skirt	Purple	25	**732-1058**
Raised semi-skirt	White	25	**731-0305**
Raised semi-skirt	Yellow	25	**732-1059**
Raised semi-skirt	Natural	25	**732-1056**
Semi-skirted	Blue	25	**732-1061**
Semi-skirted	Purple	25	**732-1062**
Semi-skirted	White	25	**732-1063**
Semi-skirted	Yellow	25	**732-1064**
Semi-skirted	Natural	25	**732-1060**
Skirted	Blue	25	**732-1050**
Skirted	Purple	25	**732-1051**
Skirted	White	25	**732-1052**
Skirted	Yellow	25	**732-1053**
Skirted	Natural	25	**732-1049**

PCR plates, 96-well, fully skirted, low profile, ABgene® Thermo-Fast®
Thermo Scientific



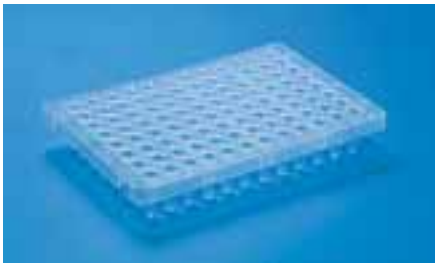
PP

The low profile of the plate decreases 'dead space' between the heated lid of the thermal cycler and the sample. This eliminates condensation on the side-wall of the tube, preventing reduction in PCR volume and increasing the efficiency of the reaction.

- Suitable for use with automated systems
- Maximum well volume 0,2 ml when used with adhesive and heat seals
- Eight holes in skirt aid plate positioning and removal from thermal cycler block
- Clear well bottom for sample visibility
- Certified free from DNase, RNase and human genomic DNA

Description	Colour	Pk	Cat. No.
PCR plate, 96-well, fully skirted, low profile	White	25	**732-0391**
PCR plate, 96-well, fully skirted, low profile	Natural	25	**732-4888**

PCR plates, 96-well, rigid, semi-skirted, ABgene® Thermo-Fast®
Thermo Scientific



PP

A rigid version of the standard semi-skirted plate for applications where extra plate rigidity is required.

Colour: Clear

Description	Pk	Cat. No.
PCR plate, 96-well, rigid, semi-skirted	25	**732-4924**

PCR plates, 96-well, non skirted, low profile, ABgene® Thermo-Fast®
Thermo Scientific

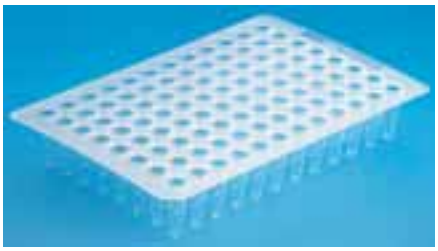
PP

The low profile of the plate decreases 'dead space' between the heated lid of the thermal cycler and the sample. This eliminates condensation on the side-wall of the tube, preventing reduction in PCR volume and increasing the efficiency of the reaction.

- Maximum well volume 0,2 ml when used with adhesive and heat seals
- Cut corner (H12)
- Certified free from DNase, RNase and human genomic DNA

Description	Colour	Pk	Cat. No.
PCR plate, 96-well, non-skirted, low profile	White	25	**732-4853**
PCR plate, 96-well, non-skirted, low profile	Clear	25	**732-4851**

PCR plates, 96-well, non-skirted, ABgene® Thermo-Fast®
Thermo Scientific



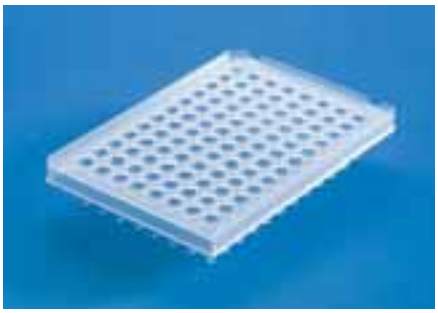
PP

Suitable for all 0,2 ml thermal cycler blocks and ABI PRISM® 310, 3100 and 3700 capillary sequencers. Available in opaque black and white for fluorescent and luminescent based procedures.

- Maximum well volume 0,3 ml when used with adhesive and heat seals
- Cut corner (H1)
- Can be sealed using Thermo-Mats™, adhesive films and foils, heat seals and flat or domed cap strips
- Certified free from DNase, RNase and human genomic DNA

Description	Colour	Pk	Cat. No.
PCR plate, 96-well, non-skirted	Clear	25	**732-4828**
PCR plate, 96-well, non-skirted	Black	25	**732-5005**
PCR plate, 96-well, non-skirted	White	25	**732-5008**
PCR plate, 96-well, non-skirted	Blue	25	**732-5003**
PCR plate, 96-well, non-skirted	Green	25	**732-5004**
PCR plate, 96-well, non-skirted	Purple	25	**732-5006**
PCR plate, 96-well, non-skirted	Red	25	**732-5007**

PCR detection plates, 96-well, ABgene® Thermo-Fast®
Thermo Scientific



PP

The Thermo-Fast® 96 PCR detection plate is specifically designed to be directly compatible with Applied Biosystems instruments. This plate can be used directly in Applied Biosystems 96-well sequencers with no adapters necessary. Available in opaque black and white for fluorescent and luminescent-based procedures.

- Maximum well volume 0,3 ml when used with adhesive and heat seals
- Cut-away corner
- Clear well bottom for sample visibility
- Certified free from DNase, RNase and human genomic DNA

Description	Colour	Pk	Cat. No.
Thermo-Fast® 96 PCR detection plate	Black	25	**732-0891**
Thermo-Fast® 96 PCR detection plate	White	25	**732-4973**
Thermo-Fast® 96 PCR detection plate	Clear	25	**732-4944**

Thermo-Tube PCR plates, ABgene® Thermo-Fast®
Thermo Scientific

PP

96-well plate suitable for use with most thermal cyclers, including Perkin Elmer 9600 and 9700.

- 12 rows of 8 Thermo-Strips, pre-assembled into a strip retainer plate
- Block stops on the underside of the retainer to allow easy removal from the thermal cycler
- Maximum well volume 0,2 ml
- Certified free from DNase, RNase and human genomic DNA

Colour: Natural

Description	Pk	Cat. No.
Thermo-Tube plate	25	**732-4857**

PCR plates, 24- and 48-wells, ABgene® Thermo-Fast®
Thermo Scientific

PP

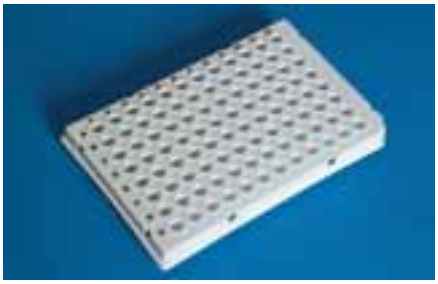
Suitable for 0,2 ml thermal cycler blocks.

- Sealable using adhesive films and foils, heat seals and flat or domed cap strips
- Maximum well volume 0,3 ml when used with adhesive and heat seals
- Certified free from DNase, RNase and human genomic DNA

Colour: Natural

Description	Pk	Cat. No.
PCR plate, 24-well, semi-skirted	50	**732-4837**
PCR plate, 48-well, semi-skirted	50	**732-4841**

PCR plates for Roche® LightCycler® 480
Brand



PP, white, suitable for qPCR

Available with 96-well low profile and 384-well formats. Both plates are compatible with many thermal cyclers, but are perfectly suited for use in the Roche® LightCycler® 480.

- Uniformally coloured with titanium dioxide (TiO_2)
- Smooth surfaces to optimise reflection of the fluorescence signal
- Extra-thin wall thickness to provide optimal thermal transfer and short cycle times
- 96-well plates have black alphanumeric code, no additional markings on the cut corner
- Manufactured under modern cleanroom conditions according to ISO 14 644-1 class 5 to 8
- Free from DNase, RNase and DNA

Barcoded versions of these plates are also available. Please contact your local VWR sales office for further details.

Description	Total Volume	Pk	Cat. No.
96-well, low profile, semi-skirted (cut corner H12)	150 µL	50	**732-1462**
96-well, low profile, semi-skirted (cut corner H12), with 50 self-adhesive sealing films	150 µl	50	**732-1463**
384-well, with full skirt* (cut corners A12, H12)	30 µl	50	**731-0164**

*suitable for multichannel pipettes and robotic systems

PCR plates
Biotix

Medical grade, virgin PP, ultra-thin walled

Developed for use with the industry's most popular thermocyclers, Biotix PCR plates are manufactured and tested to ensure robust and reproducible amplification under the most exacting protocols.

- Wells with ultra-thin walls provide excellent thermal transfer with PCR heat blocks
- Moulded-in alphanumeric grid to help with sample identification
- Able to withstand centrifugation up to 4000 RCF when supported by the appropriate plate rotor adapter
- Slightly raised well rims facilitate secure sealing with films or strip caps

BioReady™ certified for purity.

Continued on next page

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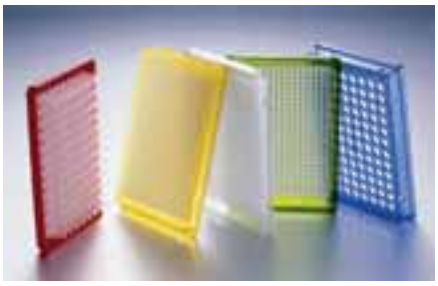
Description	Colour	Total Volume	Pk	Cat. No.
PCR plate, 96-well	Clear	200 µl	10	**732-2465**
PCR plate, 96-well, non-skirted	Clear	200 µl	10	**732-2466**
PCR plate, 96-well, half-skirted	Clear	200 µl	10	**732-2467**
PCR plate, 96-well, half-skirted for LightCycler™	White	100 µl	10	**732-2468**
PCR plate, 384-well, full-skirted	Clear	50 µl	10	**732-2469**

PCR plates, Eppendorf twin.tec®
Eppendorf



PP wells with PC plate deck and skirt

The rigidity of the plate makes it ideal for robotic handling and the PP wells have an inert, non-wetting surface that prevents DNA, RNA and enzymes from binding. The ultra thin walls ensure optimum heat transfer into the sample. All plates are autoclavable and certified free from DNase, RNase and human genomic DNA.

Eppendorf twin.tec® PCR Plate 96, skirted

- Compatible with automated systems, fits most thermal cyclers and the MegaBACE capillary sequencer
- Within SBS footprint requirements (127,76 mm (±0,25 mm) × 85,47 mm (±0,25 mm))
- Low profile design for enhanced efficiency of PCR and enables the highest efficiency for small sample volumes
- 150 µl maximum well volume (when used with cap strips)

Eppendorf twin.tec® PCR Plate 96, semi-skirted

- Suitable for Real-Time PCR
- Fits most thermal cyclers, including ABI GeneAmp 9700
- 250 µl maximum well volume (when used with cap strips)

Eppendorf twin.tec® PCR Plate 384

- U-shaped well for easy identification
- Continuous skirt for compatibility with automated systems
- Within SBS footprint requirements (127,76 mm (±0,25 mm) × 85,47 mm (±0,25 mm))
- Suitable for all common 384-well thermal cyclers, particularly Mastercycler 384
- 45 µl maximum well volume

Colour: Wells colourless, except if black (where stated); plate frame available in a choice of colours.

Description	Colour	Pk	Cat. No.
twin.tec PCR Plate 96, semi-skirted, clear wells	Clear	25	**732-0106**
twin.tec PCR Plate 96, semi-skirted, clear wells	Yellow	25	**391-2050**
twin.tec PCR Plate 96, semi-skirted, clear wells	Green	25	**391-2051**
twin.tec PCR Plate 96, semi-skirted, clear wells	Blue	25	**391-2052**
twin.tec PCR Plate 96, semi-skirted, clear wells	Red	25	**391-2053**
twin.tec PCR Plate 96, skirted, clear wells	Clear	25	**732-0107**
twin.tec PCR Plate 96, skirted, clear wells	Yellow	25	**732-0108**
twin.tec PCR Plate 96, skirted, clear wells	Green	25	**732-0109**
twin.tec PCR Plate 96, skirted, clear wells	Blue	25	**732-0110**
twin.tec PCR Plate 96, skirted, clear wells	Red	25	**391-2054**
twin.tec PCR Plate 96, skirted, black wells	Blue	25	**732-0111**
twin.tec PCR Plate 384, skirted, clear wells	Clear	25	**732-0101**
twin.tec PCR Plate 384, skirted, clear wells	Yellow	25	**732-0102**
twin.tec PCR Plate 384, skirted, clear wells	Green	25	**732-0103**
twin.tec PCR Plate 384, skirted, clear wells	Blue	25	**732-0104**
twin.tec PCR Plate 384, skirted, clear wells	Red	25	**732-0105**

Pipetting aid for Piko® PCR plates, Piko® plate illuminator

Thermo Scientific

Piko® plate illuminator provides a simple way to track the loading of reactants by illuminating the target well(s) from below with white LED lights.

- Compatible with all standard single channel, 8-channel and 16-channel pipettes
- Compact and easy to use with 10 different pre-programmed loading patterns
- 2 in 1 design accepts both 24-well and 96-well Piko® PCR plates

W×D×H: 160×90×30 mm
Weight: 0,1 kg

Description	Pk	Cat. No.
Piko® plate illuminator	1	**731-0358**

Sealing film and sealing mats for PCR plates

732-0588

732-0589

732-0590

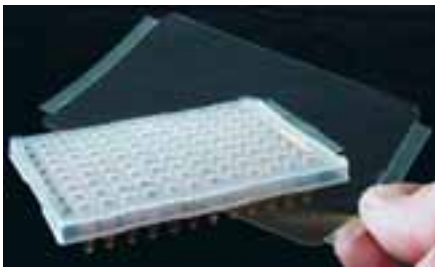
Designed to reduce evaporation when cycling 96-well plates.

Sealing film: PP, sterile, has an adhesive backing that adheres to most PCR plates and an operating temperature –40 to +125 °C.

Transparent silicone mats: Fit most brands of 96-well PCR plates, and can be cleaned and reused. Autoclavable at 121 °C.

Description	Pk	Cat. No.
Sealing film, PP, sterile	100	**732-0588**
Sealing mat, silicone, round wells	5	**732-0589**
Sealing mat, silicone, square wells	5	**732-0590**

Ultra clear films for qPCR



Polyester

Transparent polyester films with strong, non absorbing, non fluorescing medical grade adhesive for superior performance in qPCR applications. Supplied non sterile.

- Recommended for temperatures from –40 to +120 °C
- Ultra-high optical clarity
- Certified free from DNase, RNase and nuclease

Each film L×D: 142,9×79,4 mm.

Length with end-tabs removed: 121,9 mm.

Description	Pk	Cat. No.
Optically clear 50 µm thick films	100	**391-1258**
Optically clear 50 µm thick films for raised rim plates	100	**391-1295**

Adhesive PCR film seals

These heat resistant 50 µm thick films are designed for thermal cycling applications. Polypropylene films are not pierceable. For PCR applications where piercing with pipette tips or robotic probes is required for product recovery, use aluminium foil films. For Real-Time PCR applications where maximum optical clarity is required, use optically clear polyester films.

- Recommended for temperatures from –40 °C to +120 °C
- Certified free from DNase, RNase and nuclease

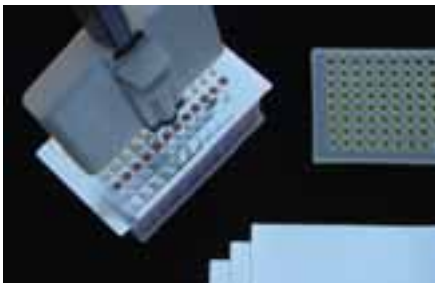
Each film L×D: 135,1×79,4 mm with sufficient sealing area for all PCR plates

Length with end-tabs removed: 123,1 mm

Description	Pk	Cat. No.
PP, non sterile	100	**391-1254**
PP, sterile	100	**391-1255**
PP, non sterile, strips to seal 2×8 wells	200	**731-0321**
Advanced PP films, non sterile*	100	**391-1294**

* stronger, thicker adhesive and cut to fit raised-rim plates

Adhesive PCR foil seals



These soft non permeable 38 µm thick aluminium foils with strong medical grade adhesive eliminate the need for heat-sealing devices or mats during thermal cycling. Compared to other aluminium foils, these foils have less tendency to roll back on themselves when removing the backing paper and fit well to the plate during application. Sterile product is packaged in tamper evident bags of 25/bag.

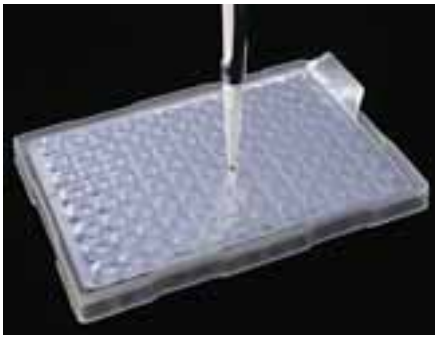
- Recommended for temperatures from –80 to +120 °C
- Easily pierceable with pipette tips and robotic probes
- Excellent vapour barrier, virtually no sample evaporation
- Certified free from DNase, RNase and nuclease

Each foil L×D: 142,9×82,6 mm with sufficient sealing area for all PCR plates.

Length with end-tabs removed: 125,4 mm.

Description	Pk	Cat. No.
Aluminium foils, non sterile	100	**391-1256**
Aluminium foils, sterile	50	**391-1257**

Aluminium foil seals for PCR and storage (96-well plates)



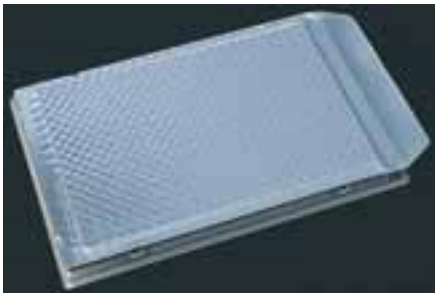
Aluminium foils, 38 µm thick, for use with 96-well plates. Fit inside the rim of raised rim plates. These foils have one partial-width end tab with no perforation. Available non sterile only.

- Recommended for temperatures from –40 to +150 °C
- Certified free from DNase, RNase and nucleic acids

Each foil L×D: 127,0×77,8 mm, including single 9,5 mm end tab.

Description	Pk	Cat. No.
Aluminium foils for 96-well plates, non sterile	100	**391-1282**

Aluminium foil seals for PCR and storage (384-well plates)



Aluminium foils, 38 µm thick, for use with 384-well plates. These foils have one end tab with no perforation. Available non sterile only.

- Recommended for temperatures from –40 to +150 °C
- Certified free from DNase, RNase and nucleic acids

Each foil L×D: 137,3×82,6 mm, including single 13,5 mm end tab.

Description	Pk	Cat. No.
Aluminium foils for 384-well plates, non sterile	100	**391-1281**

Sealing film, self-adhesive for cold storage

Brand

Aluminium sealing film (roll and single sheet) can be pierced easily with a pipette tip for sample removal. Temperature range: –80 to +120 °C.

Description	Pk	Cat. No.
Sealing film, self-adhesive, for cold storage, aluminium, roll with 100 sheets	100	**211-0000**
Microplate sealing film, self-adhesive, for cold storage, aluminium, single sheets	100	**731-0441**

Sealing film for PCR microplates, Axygen® CyclerSeal
Corning®

Safeguards samples during transport and storage. Ideal for sealing PCR microplates, but also suitable for other microplates.

- When used with a compression mat, eliminates well-to-well contamination and cross-over in PCR applications
- Functional temperature range: –40 to +104 °C
- Colour: Transparent

Description	Pk	Cat. No.
Sealing film, CyclerSeal	100	**732-7508**

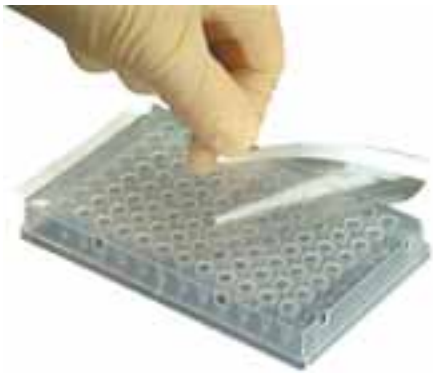
Sealing film, reflective, for PCR plates, Axygen®
Corning®

This reflective aluminium film is ideal for sealing plates containing light sensitive samples. Seals during the thermo cycling process, when used in conjunction with a compression mat. Also provides an excellent seal when used with other polystyrene and polypropylene microplates.

- Provides exceptional seal under the widest temperature conditions, –80 to +104 °C
- Pierceable to allow for direct sample recovery without peeling
- Proprietary adhesive is inert and chemically resistant to DMSO

Description	Pk	Cat. No.
Aluminium sealing foil, 35 µm	100	**732-7505**

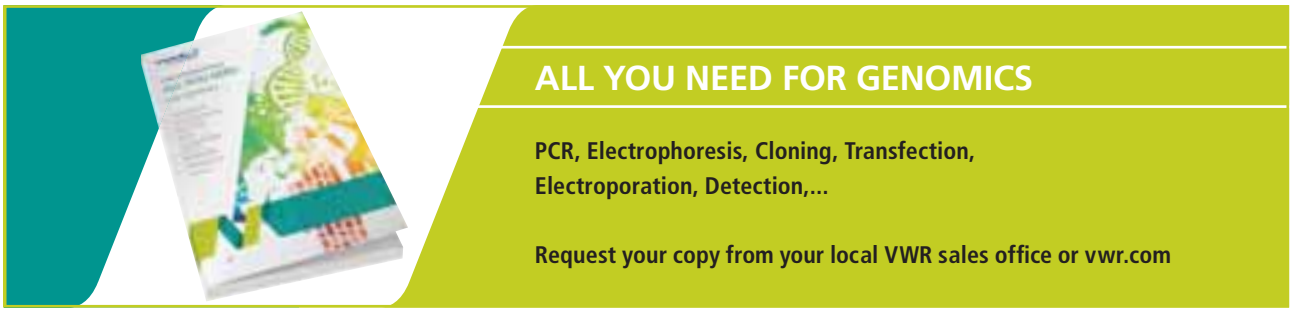
Sealing film for PCR microplates, Axygen® UltraClear
Corning®



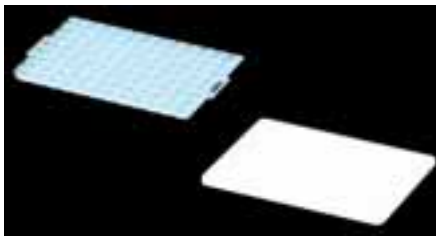
For sealing 96 and 384-well PCR plates.

- Film clarity allows for optical analysis during Real-Time PCR
- Unique pressure sensitive adhesive that leaves no tacky residue
- Functional temperature range –40 to +104 °C

Description	Pk	Cat. No.
Sealing film, UltraClear	100	**732-7509**



Silicone sealing mats, Axygen®
Corning®



Silicone

Ideal for thermal cyclers with screw down lids.

- Prevents sample evaporation and reduces the risk of well-to-well contamination
- Autoclavable and reusable
- 96-well expansion mats have a domed surface to ensure complete coverage of each well
- ImperaMat™ mats have higher chemical resistance
- Real-Time PCR compression mats are grey with holes over the plate wells to enable clear visibility

Description	Sterile	Pk	Cat. No.
AxyMat™ sealing mat for 96-well PCR plates	-	10	**732-0668**
AxyMat™ sealing mat for 384-well PCR plate	+	10	**732-0669**
VR AxyMat™ volume reducing sealing mat for 384-well plate	-	10	**732-1025**
AxyMat™ sealing mat for 96-well plate with round wells	-	10	**736-0340**
AxyMat™ sealing mat for 0,6 ml 96-well deep well plate	-	10	**736-0337**
AxyMat™ sealing mat for 2,0 ml 96-well deep well plate with square wells	-	10	**736-0346**
AxyMat™ sealing mat for 96-well ELISA and storage plates	-	10	**732-1026**
AxyMat™ sealing mat for 384-deep well plate with square wells	-	10	**736-0333**
ImpermaMat™ sealing mat for 96-deep well plate with round wells	-	10	**736-0341**
ImpermaMat™ sealing mat for 96-well plate with square wells	-	10	**736-0347**
ImpermaMat™ sealing mat for 384-well plate with square wells	-	10	**736-0334**
ImpermaMat™ sealing mat for 48-well plate with rectangular wells	-	10	**736-0350**
96-well expansion mat	-	10	**732-0672**
96-well compression mat	-	10	**732-0671**
Compression mat, flat	-	10	**732-0670**

Sealing films for heat sealing, Axygen®
Corning®

Sealing films for general storage applications.

Description	Pk	Cat. No.
EasyPierce Versafilm	100	**732-1031**
Heat sealing film with paper backing	100	**732-1032**

Sealing mats
Corning®

Multiple formats for specific and precise fit on 96-well and 384-well plates and blocks.

Round well microplate storage mat

Fits Corning® 96 round well plates and blocks.

- Manufactured from ethyl vinyl acetate (EVA), compatible with DMSO
- Certified free from DNase and RNase
- Can be applied manually or with applicator

Square well storage block sealing mat

Fits Corning® 96 square 2 ml well storage blocks.

- Manufactured from ethyl vinyl acetate (EVA), compatible with DMSO
- Certified free from DNase and RNase
- Can be applied manually or with applicator

Chemical resistant sealing mats

Precise fit for Corning® 384-well deep well PP storage block or Corning® 96-well expanded volume PP microplate.

- Solvent resistant polypropylene provides compatibility with many common organic solvents (e.g. DMSO, ethanol, methanol)
- Firm seal prevents evaporation and gas exchange
- Ideal for use in long-term, low temperature compound storage

Thermowell® sealing mat

These silicone rubber mats offer a cost effective alternative to other sealing methods and provide 100% sealing when used in conjunction with clamp or screw down heated lid thermal cyclers.

- Easy to apply and remove
- Fully autoclavable and reusable (at least five times)

Thermowell® GOLD sealing mat

Silicone rubber septa mat compatible with all Thermowell® GOLD 96-well PCR microplates.

- Pierceable surface for easy access to reaction contents
- Fully autoclavable and reusable
- Compatible with most Applied Biosystems® GeneAmp® and Prism® instruments

Description	Sterile	Pk	Cat. No.
Round well storage mat, EVA, for 96-well plates	-	100	**734-1533**
Square well storage block mat, EVA, for Corning® 2 ml square well storage blocks	-	50	**734-1535**
Chemical resistant storage mat, PP, for 96-well expanded volume PP microplate	+	50	**732-0487**
Chemical resistant storage mat, PP, for 384-well deep well PP storage block	-	50	**732-0482**
Thermowell® 96-well silicone rubber sealing mat	-	25	**734-1767**
Thermowell® GOLD 96-well silicone rubber septa mat	-	50	**734-4048**

Description	Pk	Cat. No.
Accessories		
Storage mat applicator	1	**734-1534**

Adhesive plate seal and ultra clear cap strips for qPCR, ABgene®
Thermo Scientific

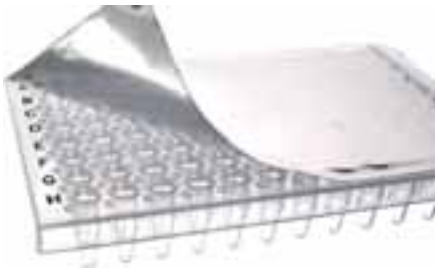
Optically clear adhesive plate seal and PP flat cap strips designed for qPCR and other fluorescence applications.

- Strong pressure sensitive adhesive on film prevents evaporation during thermal cycling or sample storage
- Peelable with no sticky residue left on the plate
- End tabs for easy seal application and removal
- Seal recommended for use in conjunction with a cycler that has a screw-down or clip-down lid
- Cap strips moulded from specially formulated PP that enhances signal detection by minimising autofluorescence and maximising transmission

Description	Pk	Cat. No.
ABsolute™ qPCR seal	50	**732-0498**
Ultra clear cap strips, 8 per strip	120	**732-0081**

Description	Pk	Cat. No.
Accessories		
Adhesive seal applicator	1	**732-4975**

Adhesive PCR film and foil seals, ABgene®
Thermo Scientific



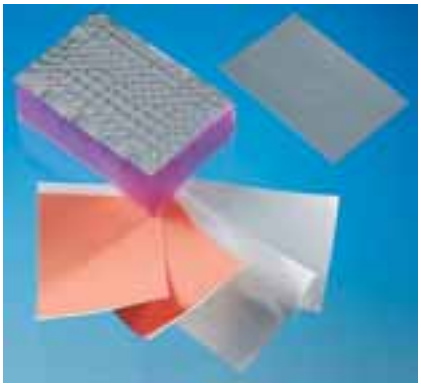
Clear polyester film, aluminium foil

Recommended for use in PCR in conjunction with a thermal cycler that has a screw-down or clip-down lid.

- Strong adhesive prevents evaporation during thermal cycling or sample storage
- Transparent film for fluorescence applications
- No sticky residue on the plate when seal is removed
- Temperature range: for film –20 to +120 °C; for foil –80 to +150 °C

Description	Pk	Cat. No.
Adhesive PCR film	100	**732-4819**
Adhesive PCR foil	100	**732-4838**

Adhesive plate seal, ABgene®
Thermo Scientific

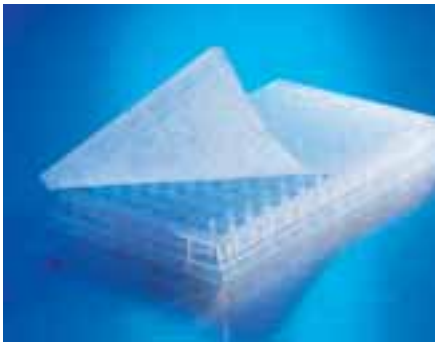


For long and short term storage of samples in microplates, and for sealing over pierced foil seals.

- Non-adhesive tab for easy removal of seal
- Temperature range –40 to +80 °C
- Pierceable

Description	Pk	Cat. No.
Adhesive plate seal	100	**732-0065**

Sealing tapes for microplates
Corning®



Easy application and removal for short and long-term storage. Provides tight seal to minimise evaporation and condensation.

Acetate tape: Suitable for use from –16 to +38 °C, transparent, non pierceable, non sterile

Aluminium tape: Suitable for use from –80 to +150 °C, not transparent, pierceable, non sterile

Breathable tape: Allows gas exchange across the surface, sterile

Universal optical tape: Suitable for use from –70 to +100 °C, transparent, non sterile

PE sealing tape: Prevents evaporation and enables oil-free operation when used with thermal cyclers with heated lids, non sterile

Description	Pk	Cat. No.
Acetate sealing tape for all microplates	100	**734-1537**
Aluminium sealing tape for 96-well plates	100	**734-1775**
Aluminium sealing tape for 384-well plates	100	**734-1774**
PCR plate seal, aluminium, for 96-well plates	100	**732-5565**
Breathable sealing tape	500	**732-0486**
Universal optical sealing tape	100	**734-4000**
PCR plate seal, PE, for 96-well plates	100	**734-1756**

Sealing tape, light blocking, non-fluorescent, Nunc™
Thermo Scientific

Vinyl film with pressure sensitive acrylate adhesive

Film for application to plate top or bottom, to protect light sensitive samples.

- Temperature stable from –40 to +80 °C
- Non-pierceable by pipette

Colour: Black

External L×W: 123×79 mm

Description	Pk	Cat. No.
Sealing tape, light-blocking	50	**731-0750**

Sealing tape with dispenser, Nunc™
Thermo Scientific

Polyester tape with acrylic adhesive

Easy peel, easy seal general-purpose tape with a faster application time than normal tape in loose sheets.

- Temperature stable from –20 to +120 °C
- Non-pierceable by pipette

Colour: Clear

External L×W: 121×78 mm (plus handle 9×78 mm)

Description	Pk	Cat. No.
Sealing tape with dispenser	1.000	**391-0113**

Automated microplate heat sealer, ALPS™ 3000
Thermo Scientific

The ALPS™ 3000 microplate heat sealer is a fast, compact heat sealer created for optimal robotic integration in high throughput environments, whilst allowing manual, bench top control.

- Seals are top-loaded and easily accessible, with rapid plate sealing action
- Touch screen technology for easy operation and clear fault diagnosis
- Equipped with both on-board touch screen operation for bench top use and an RS232 port, plus programming parameters for robotic integration
- Sensors detect the presence of sealing tape, microplate and air input, allowing automatic system shut-off to eliminate product waste, system hold-ups and potential injury
- Can be integrated with the majority of commercially available plate stackers

Delivery information: Supplied with plate carrier for non skirted PCR plates, 3 plate carrier inserts, anti-surge fuses, 2 vacuum cups, 3 m air line, film loading tool, RS232 communications cable, power cable and operation manual.

Air input pressure (psi/bar)	80 psi (5,5 bar) - 87 psi (5,7 bar)
Air requirement (l/min)	50
Operating temperature range (°C)	15...40
Sealing plate height (mm)	8 - 46
Sealing temperature range (°C)	Ambient to 200
Sealing time (sec)	6 to 12 seconds per plate
Weight (kg)	12
W×D×H (mm)	185×414×350

Description	Pk	Cat. No.
ALPS™ 3000	1	**731-0201**

Description	Pk	Cat. No.
Seals for automated microplate heat sealer, ALPS 3000		
Thermo-Seal, 78 mm×370 m	1	**732-0842**
Clear Seal Strong, 78 mm×610 m	1	**731-0240**
Easy Pierce 20 µm, 78 mm×610 m	1	**732-0843**
Easy Pierce foil, 78 mm×610 m	1	**732-0844**
Clear Seal 3730, 78 mm × 610 m	1	**732-0846**
Clear Seal Diamond, 78 mm×370 m	1	**732-0847**

Microplate heat sealer, ALPS™ 50V
Thermo Scientific

Heat sealing offers superior sample protection of storage and reaction plates in applications including compound storage, sample archiving and PCR. The ALPS™ 50V manual microplate heat sealer is designed to provide sealing consistency in low throughput applications.

- Provides secure, tight seals around individual wells eliminating sample loss through evaporation and cross contamination between wells
- Compact and portable
- Simple touch pad controls adjust sealing temperature and time, and audible alarm indicates sealing completion
- Ergonomic counter lever handle design reduces operator effort and minimises strain
- Able to seal a wide range of plates of differing heights when supported by plate carriers (available separately)

Delivery information: Supplied with plate carrier for non skirted PCR plates (which is also available separately).

Operating humidity range (%)	20 - 80% non condensing
Operating temperature range (°C)	18...30
Temperature set range (°C)	125 to 200 in 1 °C increments

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Time set point range (s)	1 to 9 seconds in 0,5 second increments
Weight (kg)	7,2
W×D×H (mm)	220×321×425

Description	Pk	Cat. No.
ALPS™ 50V	1	**732-0996**

Description	Pk	Cat. No.
Seals for ALPS 50V heat sealer		
Thermo-Seal, 85×135 mm, 100 sheets	100	**732-4820**
Easy Peel, 85×135 mm, 100 sheets	100	**732-4860**
Easy Pierce foil, 80×125 mm, 100 sheets	100	**732-4866**
Clear Seal Diamond, 85×135mm, 100 sheets	100	**732-4890**
Easy Pierce foil, 20 µm, 85×135 mm, 100 sheets	100	**732-0840**
Clear Seal 3730, perforated, 85×135 mm, 100 sheets	100	**732-0841**
Accessories		
Plate carrier for non skirted PCR plates	1	**731-0251**
Foil stripper	1	**293-2113**
Plate carrier, 384-well	1	**732-0380**
Standard microtitre plate carrier	1	**732-0393**

Semi automated microplate heat sealer, Axygen® PlateMax®

Corning®

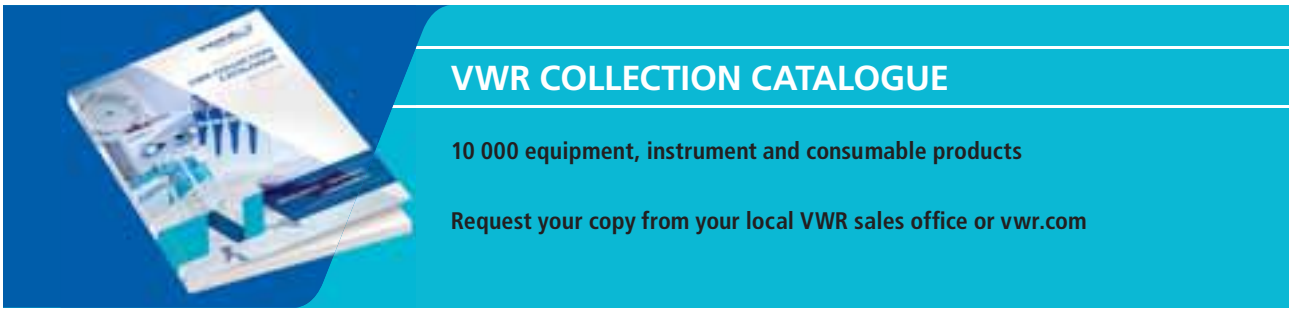
Axygen® PlateMax® semi automatic plate sealer is ideal for the low-to-medium throughput laboratory that requires uniform and consistent sealing of microplates. Offering complete versatility, the PlateMax® sealer will accept a full range of plates for PCR, assay or storage applications. It can be used to seal a wide range of plate heights. Sealing parameters are set and displayed via the user-friendly control panel and the sealing operation is automated to ensure consistent results.

- Adjustable sealing temperature: 100 to 190 °C
- Sealing times adjustable from 0,5 to 10 seconds
- Compatible plate materials: PP, PS, PE
- Large LCD display that shows all operating parameters
- Power saver feature that saves power by shutting down heating block when inactive can be turned off for labs that wish to keep unit at sealing temperature for immediate use throughout the day

Delivery information: Includes adapters for standard and deep well microplates.

Description	Pk	Cat. No.
Plate sealer, Axygen® PlateMax™, semi automated (includes adapters for standard and deepwell microplates)	1	**731-0352**

Description	Pk	Cat. No.
Sealing films for Axygen® PlateMax™ heat sealer		
PlateMax™ ultra clear peelable heat sealing film for qPCR	100	**731-0354**
PlateMax™ peelable heat sealing film for low temperature compound storage and PCR	100	**731-0355**
PlateMax™ pierceable aluminum heat sealing film for storage applications	100	**731-0356**
PlateMax™ peelable heat sealing film for compound storage	100	**731-0357**
Accessories		
PlateMax™ support block for assay and storage plates	1	**731-0393**
PlateMax™ adapter for sealing assay and PCR plates	1	**731-0394**



Thermal cyclers, Techne® ³Prime

The ³Prime personal cycler offers easy programming and instrument flexibililty, whilst maintaining the rapid ramp rates and small footprint that make it ideal for research and teaching laboratories. Using a colour touch screen and ready to go templates the user is intuitively guided to create even complicated programs, with a methodology that is standardised across the whole Techne® thermal cycler range.

The ³PrimeX mid-sized cyclers deliver all the features of the ³Prime instrument but with an expanded sample capacity, accommodating 48×0,2 ml microtubes or 30×0,5 ml tube. Gradient cycling can be achieved directly using the ³PrimeG instrument or by upgrading the ³PrimeX unit.

The ³PrimeG is a small gradient thermal cycler that builds on all the features of the ³PrimeX instrument. The 48-well block format offers eight columns for annealing temperature optimisation and six rows for optimising reagents such as $MgCl_2$ and primer concentrations. Annealing temperatures can be optimised over 14 °C between temperatures 30 °C to 80 °C. The gradient calculator function displays the temperature for each of the eight columns, ensuring easy replication of thermal conditions.

- Colour touch screen for fast program set-up
- Fast ramp rate of up to 3,0 °C/sec
- Temperature range +4 °C to +100 °C
- Gradient cycling is available directly using the ³PrimeG instrument or by upgrading the ³PrimeX unit
- Protocols and temperature logs transferred between instruments and PC via USB

Note: Exchange of thermal cycler blocks must be carried out by a trained service engineer. Please contact your local VWR office for details about replacement blocks available.

Model	³Prime	³PrimeX	³PrimeG
Block accuracy (°C)	<±0,25*		
Block homogeneity (°C)	<±0,3*		
Gradient span (max/min) (°C)	-	Can be upgraded to ³PrimeG specification	14 / 1
Gradient temperature range (°C)			30 - 80
Interfaces	3,5" VGA touch screen		
Lid temperature range (°C)	Selectable 100 to 115 or off		
Power (W)	155		
Programs	≤1000		
Ramp rate (°C/sec)	<3,0		
Temperature range (°C)	4...100		
Weight (kg)	6,0		
W×D×H (mm)	210×350×180		

Description	Pk	Cat. No.
³Prime thermal cycler, 24×0,2 ml	1	**732-1612**
³Prime thermal cycler, 18×0,5 ml	1	**732-1610**
³PrimeX thermal cycler, 48×0,2 ml	1	**732-1606**
³PrimeX thermal cycler, 30×0,5 ml	1	**732-1604**
³PrimeG gradient thermal cycler, 48×0,2 ml	1	**732-1608**
³PrimeG gradient thermal cycler, 30×0,5 ml	1	**732-1607**
³PrimeX gradient upgrade	1	**732-1602**

* Recorded at 55 °C

Thermal cyclers, Techne® Prime Elite

Prime Elite is a high-performance networkable thermal cycler equipped as standard with features that include a large 5,7" (14,5 cm) colour touchscreen, fast ramp rates, an innovative front-loading PCR plate drawer, automatic non-motorised heated lid, TERS™ thermal energy recovery system and a space-saving, stackable design. Prime Elite and Prime Elite satellites can be combined to form a multi-block network with the satellites controlled from either a PC or the Prime Elite. Temperature gradient capability and 4 year warranty is included as standard.

Each Prime Elite thermal cycler can control up to 3 satellites via rear facing USB ports. Alternatively, Prime Elite satellites can be controlled independently via a PC. Cables and software are provided as standard. Prime Elite also contains a front-facing USB port which allows easy program transfer between instruments or via a PC. At least 1000 programs can be stored on each Prime Elite with unlimited storage on USB sticks, ideal for multi-user laboratories. The Prime Elite USB ports also facilitate free software updates, which are available to download from the Techne® website.

- Colour 14,5 cm touchscreen provides optimal brightness and clarity
- Well designed intuitive software allows fast and simple programme setup
- Fast 5 °C/sec ramp rate and low energy consumption is facilitated by TERS™ thermal energy recovery system, which stores heat produced from each cooling phase to use in the next heating phase
- A mechanical front-loading plate mechanism operates the heated lid which is brought down onto the PCR tubes or plate with an even 75 newton force to ensure optimum function and minimal evaporation
- Front-facing USB port facilitates easy program transfer and software updates; rear-facing USB connectivity allows simple networking of instruments
- On-board gradient calculator and Tm calculator
- Advanced electrical power filter improves robustness by smoothing electricity fluctuations

Delivery information: Note: Exchange of thermal cycler blocks must be carried out by a trained service engineer. Please contact your local VWR office for details about replacement blocks available.

Model	Prime Elite
Block accuracy (°C)	<±0,2
Block homogeneity (°C)	<±0,3
Gradient span (max/min) (°C)	30/1
Gradient temperature range (°C)	4...100
Interfaces	5,7" VGA colour touch screen graphical display
Lid temperature range (°C)	35 to 115 or off
Password	Yes
Power (W)	950
Programs	≤1000
Ramp rate (°C/sec)	5
Temperature range (°C)	4...100
Weight (kg)	14
W×D×H (mm)	276×375×312

Description	Pk	Cat. No.
Prime Elite thermal cycler, 96×0,2 ml	1	**732-1687**
Prime Elite thermal cycler, 60×0,5 ml	1	**732-1688**
Prime Elite thermal cycler, 384-well plate	1	**732-1689**
Prime Elite satellite thermal cycler, 96×0,2 ml	1	**732-1690**
Prime Elite satellite thermal cycler, 60×0,5 ml	1	**732-1691**
Prime Elite satellite thermal cycler, 384-well plate	1	**732-1692**

Thermal cyclers, Techne® Prime

The Prime range of full-sized thermal cyclers delivers both high performance and high throughput to provide maximum flexibility when processing a large number of samples in parallel.

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The PrimeG is a gradient enabled thermal cycler with all the features of the Prime unit. The wide linear gradient with a range of 30 °C allows annealing temperatures to be optimised in one experiment. The gradient calculator function displays the temperature for each of the eight columns, ensuring easy replication of thermal conditions.

Prime Combi-Block cyclers provide exceptional flexibility with the ability to accommodate 33×0,2 ml and 33×0,5 ml tubes, in 6 rows and 11 columns. Prime Combi-Block cyclers are available with or without a temperature gradient, which is upgradable later.

- Colour touch screen for fast program set-up
- Fast ramp rate of up to 3,4 °C/sec
- USB port enables the transfer of programs between instruments and temperature logs to your PC
- Gradient cycling is available directly using the PrimeG instrument or by upgrading the Prime unit

Note: Exchange of thermal cycler blocks must be carried out by a trained service engineer. Please contact your local VWR office for details about replacement blocks available.

Model	Prime	PrimeG	Prime	PrimeG	Prime	PrimeG	Prime
Block accuracy (°C)	<±0,25*						
Block homogeneity (°C)	<±0,3*						
Gradient span (max/min) (°C)	Can be upgraded to PrimeG specification	29 / 1 (PrimeG) 25 / 1 (PrimeG Combi-Block) 19 / 1 (PrimeG 384)	Can be upgraded to PrimeG specification	29 / 1 (PrimeG) 25 / 1 (PrimeG Combi-Block) 19 / 1 (PrimeG 384)	Can be upgraded to PrimeG specification	29 / 1 (PrimeG) 25 / 1 (PrimeG Combi-Block) 19 / 1 (PrimeG 384)	Can be upgraded to PrimeG specification
Gradient temperature range (°C)		30 - 80		30 - 80		30 - 80	
Interfaces	5,7" VGA touch screen						
Lid temperature range (°C)	Selectable 100 to 115 or off						
Power (W)	450						
Programs	≤1000						
Ramp rate (°C/sec)	<3,4						
Temperature range (°C)	+4...100						
Weight (kg)	9,4						
W×D×H (mm)	240×420×240						

Description	Pk	Cat. No.
Prime thermal cycler, 96×0,2 ml	1	**732-1601**
PrimeG gradient thermal cycler, 96×0,2 ml	1	**732-1595**
Prime thermal cycler, 60×0,5 ml	1	**732-1599**
PrimeG gradient thermal cycler, 60×0,5 ml	1	**732-1594**
Prime thermal cycler, Combi-Block, 33×0,2 ml and 33×0,5 ml	1	**731-0399**
PrimeG gradient thermal cycler, Combi-Block, 33×0,2 ml and 33×0,5 ml	1	**731-0401**
Prime thermal cycler, 384-well	1	**732-1597**

Description	Pk	Cat. No.
Prime gradient upgrade	1	**732-1593**

* Recorded at 55 °C

Real-Time PCR system, PikoReal®
Thermo Scientific

The PikoReal® Real-Time PCR system is light, quiet and has a small footprint, making it ideal for personal use. The PikoReal® system is available as a 96-well or 24-well instrument that fits PCR plates one quarter the size of a standard plate, while maintaining industry standards for well volume and well spacing. Due to its small size, low energy consumption and durable design, the PikoReal® system is also suitable for field applications.

- Superior thermal performance - block design combined with precise temperature control ensures that quantification results are reliable and reproducible
- Five optical channels facilitate multiplexing
- Stand-alone or PC control - the latter allows remote monitoring of any qPCR experiment

Thermal block	
Block formats	24-well, 96-well (not interchangeable)
Sample volume (µl)	10 - 50 (PikoReal® 24); 5 - 20 (PikoReal® 96)
Consumables	24-well Piko® PCR plates (¼ of a standard ANSI 96-well plate), low profile strip tubes and PCR tubes; 96-well Piko® PCR plates (¼ of a standard ANSI 384-well plate)
Max. heating rate (°C/sec)	>5
Max. cooling rate (°C/sec)	4,5
Temperature range (°C)	4...99,9
Temperature accuracy (°C)	±0,2
Temperature uniformity (°C)	±0,3 at 95 °C; ±0,15 at 60 °C; ±0,2 at 72 °C

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Heated lid	
Temperature range (°C)	30...110
Control	Automatic temperature and pressure setting
Optics	
Excitation	5 LEDs
Excitation range (nm)	475 - 640
Detection	CCD
Detection range (nm)	520 - 740
Detection channels	5
Multiplex	Up to 4 targets
Dynamic range	10 logs
Sensitivity	1 copy
Scan time for 4 multiplexing channels (sec)	<10
Software	
Analysis modes	Absolute quantification, relative quantification, melt curve analysis, high resolution melt (HRM), allelic discrimination
System	
Operating systems	Windows XP, Windows 7
Communication	Ethernet (up to 10 instruments from a single PC) or USB
Power (W)	Max. 200
W×D×H (mm)	300×230×310
Weight (kg)	10

Description	Pk	Cat. No.
PikoReal® 24 Real-Time PCR system	1	**731-0343**
PikoReal® 96 Real-Time PCR system	1	**731-0344**

Description	Pk	Cat. No.
Accessories		
Piko® plate illuminator	1	**731-0358**

Thermal cyclers, Piko®
Thermo Scientific

The Piko® thermal cyclers deliver high performance in a compact package. They allow significant reductions in PCR run times and offer an ideal solution for both conventional and fast PCR applications. The Piko® thermal cyclers are available in two different block configurations: 24-well and 96-well.

The 24-well cycler accepts all standard low profile single tubes and 8-tube strips with flat caps as well as 24-well Piko® PCR plates. The 96-well instrument utilises 96-well Piko® PCR plates, which are only 25% of the size of a conventional microplate. Despite the small size, all Piko® PCR plates maintain industry standard well spacing and sample capacity. The 24-well and 96-well Piko® PCR plates are compatible with standard multi-channel pipettes, reagent dispensers, and automated liquid handling systems.

- Small footprint saves lab space and easily fits on lab bench
- Fast thermal cycling - average ramp rate 5 °C/second, PCR reactions in as little as 15 minutes
- Reduced plastic consumption and lower reagent cost due to low volumes - up to four 96-well Piko® PCR plates can be snapped into a single frame producing the equivalent of a standard 384-well plate
- Excellent thermal performance with reduced sample to sample variation
- Auto restart on power failure prevents loss of valuable reactions
- Ethernet port enables connection to a PC

Model	TCP0024	TCP0096
Block accuracy (°C)	±0,2	
Block homogeneity (°C)	±0,3	
Display	Backlit LCD	
Power (W)	200	
Ramp rate (°C/sec)	>5 heating, >4,5 cooling	
Temperature range (°C)	4...99,9	
Weight (kg)	4 (including power supply and cord)	
W×D×H (mm)	160×170×230	

Description	Pk	Cat. No.
Thermal cycler, Piko®, 24-well system (TCP0024)	1	**731-0235**
Thermal cycler, Piko®, 96-well system (TCP0096)	1	**731-0236**

Thermal cyclers, Arktik™

Thermo Scientific

The Arktik™ cyclers suit the needs of a dynamic laboratory where reliability and user friendliness are appreciated. It accommodates three interchangeable blocks (for 96-well, dual 48-well and 384-well plates) allowing increased flexibility. The cycler is controlled through a simple user interface with graphical representation of the cycling routine, making navigation convenient. The USB port enables protocol transfer. The heated lid temperature can be manually adjusted and set between 30 and 110 °C, or completely switched off. The heated lid over-tightening protection system prevents the user from applying too much pressure.

- Excellent thermal precision
- Easily interchangeable heating blocks
- Multiple user option with the dual 48-well block
- Accepts almost any type of standard PCR plastics
- Low noise and auto restart on power failure

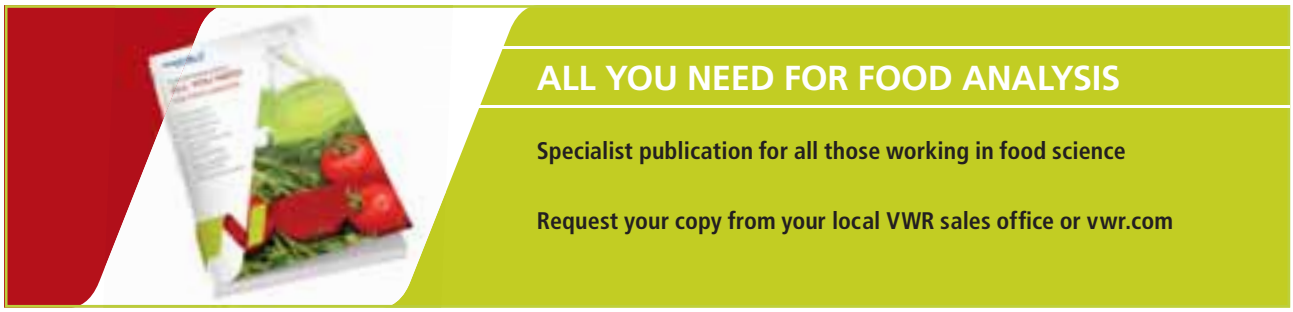
Ordering information: Purchase of a heat block is required for operation of the Arktik™ thermal cycler.

Model	TCA0001	TCA0002
Block accuracy (°C)	±0,3 at 90 °C	
Block homogeneity (°C)	±0,4 at 90 °C	
Gradient temperature range (°C)	30 °C max.	-
Lid temperature range (°C)	30 - 110	
Power (W)	600	
Ramp rate (°C/sec)	3,0	
Temperature range (°C)	+4...99,9	
Weight (kg)	10,5	
W×D×H (mm)	290×380×290	

Description	Pk	Cat. No.
Thermal cycler, Arktik™, base with gradient (TCA0001)	1	**731-0231**
Thermal cycler, Arktik™, base without gradient (TCA0002)	1	**731-0232**

Description	Pk	Cat. No.
Blocks for Arktik™ thermal cyclers		
96-well heating block for Arktik™ thermal cycler	1	**731-0233**
384-well heating block for Arktik™ thermal cycler	1	**731-0237**
2×48-well dual heating block for Arktik™ thermal cycler*	1	**731-0234**

*Does not include gradient feature, but can be used both with gradient or non-gradient base



Hybridisation ovens, HB-500 Minidizer
UVP

The Minidizer oven is designed as a personal desk-top unit that is both compact and portable. It is ideal for use in start-up laboratories or those with limited space and low usage requirements. The unit cover swings open to allow easy access to the carousel, which can also be removed for easy changing of bottles.

- Accurate temperature and rotation speed controls
- Dynamic mixing capability is ideal for cDNA library screenings, primer synthesis and nucleic acid hybridisation
- Stainless steel interior is easy to clean

Model	HB-500
Bottle capacity	Four 35×150 mm or eight 50 ml or eight 15 ml bottles
External W×D×H (mm)	229×203×330
Heating element (W)	500
Speed (min^{-1})	12
Temperature range (°C)	Ambient +10...80

Description	Pk	Cat. No.
HB-500 Minidizer	1	**732-4315**

Hybridisation oven, HB-1000 Hybridizer
UVP

The Hybridizer oven heats up fast and can be stacked to make the best use of available space. The variable speed control enables consistent saturation of samples for washing or hybridising and the carousel can be replaced with a rocker tray as an alternative, if purchased as an accessory.

- Large LED displays current temperature inside the chamber
- Protective tray included to allow easy cleaning of spilled media
- RPM knob adjusts speed control of the wheel
- Accurate temperature and rotation speed controls
- Dynamic mixing capability is ideal for cDNA library screenings, primer synthesis and nucleic acid hybridisation
- Stainless steel interior is easy to clean

Bottle capacity	Twenty 35×150 mm or ten 35×300 mm bottles
External W×D×H (mm)	445×381×406
Heating element (W)	1250
Temperature range (°C)	Ambient +10...99.9
Variable speed (min^{-1})	10 - 15

Description	Pk	Cat. No.
HB-1000 Hybridizer	1	**732-4300**

Description	Pk	Cat. No.
Accessories		
Hybridisation oven bottles, small	1	**732-4350**
Hybridisation oven bottles, large	1	**732-4351**
Optional rocker tray for HL-2000, HB-1000, HM-4000	1	**732-4348**
Orbital motion tray for use outside the oven	1	**731-1015**

Hybridisation oven, HL-2000 HybriLinker
UVP

The HybriLinker oven combines an HB-1000 hybridisation oven with a CX-2000 crosslinker with operation independent of one another. The crosslinker portion of the unit has a UV light emission at 254 nm for the bonding of DNA to a membrane in seconds. The UV dose can be entered as either time or microjoules per cm^2 of energy for accurate exposure.

- Accurate temperature and rotation speed controls
- Dynamic mixing capability is ideal for cDNA library screenings, primer synthesis and nucleic acid hybridisation
- Stainless steel interior is easy to clean

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Bottle capacity	Twenty 35×150 mm or ten 35×300 mm bottles
External W×D×H (mm)	445×381×610
Heating element (W)	1250
Lower chamber - UV output	254 nm (set 999900 microjoules/cm^2 or up to 999,9 mins of exposure)
Temperature range (°C)	Ambient +10...99.9
Variable speed (min^{-1})	10 - 15

Description	Pk	Cat. No.
HL-2000 HybriLinker	1	**732-4301**

Description	Pk	Cat. No.
Accessories		
Hybridisation oven bottles, small	1	**732-4350**
Hybridisation oven bottles, large	1	**732-4351**
Optional rocker tray for HL-2000, HB-1000, HM-4000	1	**732-4348**
Orbital motion tray for use outside the oven	1	**731-1015**

Hybridisation oven, HM-4000 Multidizer

UVP

The ultimate oven for multiple motion options, the Multidizer oven comes with both a rotary wheel (in the lower chamber) and a reciprocating shaker tray (in the upper chamber). It also offers a rocker tray and/or orbital motion tray as options. These are to accommodate different containers and usages. The lower chamber of the unit is the same as for the HB-1000 and operates independently of the top chamber.

- Accurate temperature and rotation speed controls
- Dynamic mixing capability is ideal for cDNA library screenings, primer synthesis and nucleic acid hybridisation
- Stainless steel interior is easy to clean

Bottle capacity	Twenty 35×150 mm or ten 35×300 mm bottles (lower chamber)
External W×D×H (mm)	445×381×725
Lower chamber- heating element (W)	1250
Lower chamber- temperature range (°C)	Ambient +10...99.9
Lower chamber- variable speed (min^{-1})	10 - 15
Upper chamber - carousel (min^{-1})	12 - 20
Upper chamber - heating element (W)	500
Upper chamber - orbital tray, motorised (min^{-1})	1 - 30
Upper chamber - shaker tray speed (cycles/min)	54 - 106
Upper chamber - temperature range (°C)	Ambient +10...80

Description	Pk	Cat. No.
HM-4000 Multidizer	1	**732-4316**

Description	Pk	Cat. No.
Accessories		
Hybridisation oven bottles, small	1	**732-4350**
Hybridisation oven bottles, large	1	**732-4351**
Carousel for oversized 70×300 mm bottles, carousel is placed in the lower chamber	1	**732-4310**
Acrylic carousel for 10×50 ml conicals, operates at 10 to 20 rpm, carousel is placed in the upper chamber	1	**732-4311**
Acrylic carousel accommodates four 35×300 mm, eight 35×150 mm bottles or eight 50 ml bottles, operates at 10 to 20 rpm, carousel is placed in the upper chamber	1	**731-1014**
Optional rocker tray for HL-2000, HB-1000, HM-4000	1	**732-4348**
Optional orbital motion tray for HM-4000	1	**732-4349**

Hybridisation incubators, Techne® HB-1D and HB-3D

Ideal for blotting techniques in which RNA and DNA or proteins are immobilised onto nylon or nitrocellulose filters. Detection of the desired sequence is usually performed using radioactive or colourimetric probes.

Hybrigene HB-3D

- Versatile quality at an affordable price offering excellent temperature accuracy and uniformity
- The Hybrigene is a compact, stackable alternative to the Hybridiser HB-1D, for when space is important and throughput is not a priority
- Can stack up to three ovens, saving valuable laboratory space
- Holds up to 16 mini and four large glass tubes

Hybridiser HB-1D

- Adjustable rotation speed
- High capacity; up to 24 mini tubes or 6 unique large tubes can be used
- Hybridisations can be performed in a minimal volume of 5 ml
- Adjustable feet to enable accurate levelling
- Double-glazed glass door; quiet and safe, provides durable protection

Ordering information: A wide range of accessories are available including mini tubes, tube holders, high temperature sealing rings (for operation up to 100 °C), shelves, rocking platforms, please enquire for details.

Model	HB-1D	Hybrigene HB-3D
Absolute accuracy (°C)	<±0,3	
Adjustable rocking platform (min^{-1})	5 - 20 or 15 - 60	
Adjustable rotation speed (min^{-1})	0,5 - 20	
Bottle capacity	Max. 24 mini or 6 large glass tubes	Max. 16 mini and 4 large glass tubes
External W×D×H (mm)	385×285×555	383×355×432
Stability in chamber (°C)	<1,0	
Stability in tubes (°C)	<±0,1	
Temperature range (°C)	Ambient +10 to 100	Ambient +10 to 80
Temperature set point resolution (°C)	0,1	
Uniformity in chamber (°C)	<±1,5	
Uniformity in tubes (°C)	<±1,0	<±0,5
Weight (kg)	24	21

Description	Pk	Cat. No.
Hybridisation incubator, Hybridiser HB-1D without tubes	1	**731-0177**
Hybridisation incubator, Hybrigene HB-3D without tubes	1	**731-0179**

Description	For	Pk	Cat. No.
Accessories			
Tube rack holder, HTH-1, accommodates 3 large and 3 small tubes plus end caps. Useful storage facility for tubes during membrane loading or when not in use.	HB-1D and HB-3D	1	**466-0118**
Membrane separators, 200×200 mm, pack of 5	HB-1D and HB-3D	5	**466-0119**
Stainless steel rocking platform, 0-60 oscillations/min	HB-1D	1	**445-0030**
Stainless steel rocking platform, 0-60 rpm	HB-3D	1	**731-0196**
Tube carrier with clips for 8x50 ml tubes	HB-3D	1	**731-0175**
Hybridisation tubes			
Large (80 mm) glass hybridisation tube without end caps	HB-1D	1	**445-0019**
Large (80 mm) glass hybridisation tube with end caps	HB-1D	1	**445-0020**
Large (80 mm) glass hybridisation tube with end caps	HB-3D	1	**731-0176**
Small (44 mm) glass hybridisation tube with screw cap	HB-1D	1	**445-0021**
Small (44 mm) glass hybridisation tube with screw cap	HB-3D	1	**731-0178**

Hybridisation bottles
Wheaton

Borosilicate glass bottles, PBT caps with PTFE/silicone liners

Useful in nucleic acid and protein blotting procedures that require a minimum of probe solution, these bottles eliminate the need for messy bags and allow hybridisation and wash solutions to be quickly poured in and out.

- Five bottle sizes to accommodate a variety of membrane sizes
- Bottles fit most standard hybridisation ovens
- Heavy 3,2 mm side walls provide added safety
- Safety-coated bottles are available with a strong, slip-resistant plastic coating to reduce potential breakage and exposure to hazardous materials
- Acrylic rack for holding up to six hybridisation bottles available for safe transport or laboratory storage

Description	Ø×L (mm)	For	Pk	Cat. No.
Standard hybridisation bottle	35×75	-	1	**732-4600**
Hybridisation bottle with safety coating	35×75	-	1	**732-4606**
Standard hybridisation bottle	35×100	-	1	**732-4601**
Hybridisation bottle with safety coating	35×100	-	1	**732-4607**
Standard hybridisation bottle	35×150	-	1	**732-4602**
Hybridisation bottle with safety coating	35×150	-	1	**732-4608**
Standard hybridisation bottle	35×300	-	1	**732-4603**
Hybridisation bottle with safety coating	35×300	-	1	**732-4609**
Standard hybridisation bottle	63,6×300	-	1	**732-4604**
Hybridisation bottle with safety coating	63,6×300	-	1	**732-4610**
Acrylic rack		6 Bottles	1	**732-4605**

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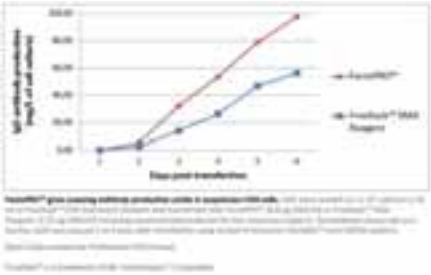
DNA transfection reagents, FectoPRO™ Transfection Kit

Polyplus-transfection



The FectoPRO™ Transfection Kit is specifically designed for enhanced Transient Gene Expression (TGE) in suspension CHO and HEK-293 cells in various serum-free media, using low DNA amount (<1 µg/ml of cell culture). The FectoPRO™-mediated transfection process is easily scalable from a few millilitres to several litres of cell culture, ensuring robust reproducible protein production.

- High protein and antibody production yields
- Compliant with biomanufacturing guidelines
- Cost-effective TGE: Uses low plasmid DNA amount
- Easily scalable
- Compatible with various mammalian expression media and cell systems
- Reproducible production yields

Delivery information: Each kit contains equal parts FectoPRO™ Reagent and FectoPRO™ Booster. FectoPRO™ Booster is also available separately.

Description	Pk	Cat. No.
FectoPRO™ (1 ml FectoPRO™ Reagent, 1 ml FectoPRO™ Booster)	1 ml	**116-001**
FectoPRO™ (10 ml FectoPRO™ Reagent, 10 ml FectoPRO™ Booster)	10 ml	**116-010**
FectoPRO™, 10×10 ml, (10×10 ml FectoPRO™ Reagent, 10×10 ml FectoPRO™ Booster)	1 KIT	**116-100**
FectoPRO™ Booster	10 ml	**704-10**

DNA and siRNA transfection reagent, jetPRIME®

Polyplus-transfection

The jetPRIME® DNA and/or siRNA transfection reagent is a powerful, and versatile reagent designed to ensure high DNA transfection efficiency and excellent gene silencing in a variety of adherent cells. It is ideal for co-transfection of DNA and siRNA. jetPRIME® is gentle to cells since it requires low amounts of reagent and nucleic acid during transfection. Effective and non toxic DNA and siRNA delivery is essential for reliable scientific results.

- High DNA transfection efficiency
- Uses low amounts of reagent and nucleic acid
- One reagent for DNA and/or siRNA transfection
- Gentle to cells

Delivery information: Supplied with an optimised sterile buffer which must be used to ensure successful transfection experiments. The concentrated buffer provided with 114-75C must be diluted 1:5 in sterile H_2O just prior to use. 1,5 ml is sufficient to perform ~375 transfections in 6-well plates.

Description	Pk	Cat. No.
jetPRIME® DNA and siRNA transfection reagent, 0,1 ml, with 5 ml jetPRIME® buffer	0,1 ml	**114-01**
jetPRIME® DNA and siRNA transfection reagent, 0,75 ml, with 60 ml jetPRIME® buffer	0,75 ml	**114-07**
jetPRIME® DNA and siRNA transfection reagent, 1,5 ml, with 2×60 ml jetPRIME® buffer	1,5 ml	**114-15**
jetPRIME® DNA and siRNA transfection reagent, 5×1,5 ml, with 10×60 ml jetPRIME® buffer	7,5 ml	**114-75**
jetPRIME® DNA and siRNA transfection reagent, 5×1,5 ml, with 120 ml 5X jetPRIME® buffer	7,5 ml	**114-75C**

siRNA transfection reagent, INTERFERin®

Polyplus-transfection

INTERFERin® is a powerful, ready to use siRNA reagent which provides more than 90% silencing efficiency at 1 nM siRNA in a wide variety of cells. For high throughput screening applications see INTERFERin®-HTS.

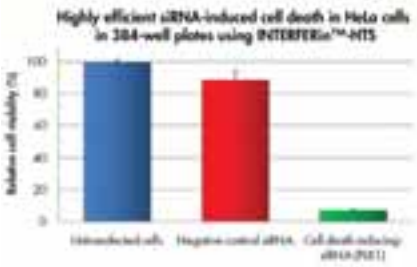
- Easy standard protocol
- Gentle mode of action for more robust data and excellent cell viability
- Compatible with serum and antibiotics

Delivery information: 1 ml of INTERFERin® is sufficient to perform 500 to 1000 transfections in 24-well plates.

Description	Pk	Cat. No.
INTERFERin® siRNA transfection reagent, 0,1 ml	100 µl	**409-01**
INTERFERin® siRNA transfection reagent, 1 ml	1 ml	**409-10**
INTERFERin® siRNA transfection reagent, 5×1 ml	5	**409-50**

HTS siRNA transfection reagent, INTERFERin®-HTS

Polyplus-transfection



INTERFERin®-HTS is a siRNA transfection reagent especially developed for High Throughput Screening (HTS) applications providing great silencing efficiency, excellent reproducibility and high cell viability with very low amounts of reagent. INTERFERin®-HTS is cost-effective, easy to handle, compatible with serum and antibiotics, and comes with reverse and forward protocols for 96- and 384-well plates. For routine transfections see INTERFERin® siRNA tranfection reagent.

- Great silencing from 10 to 50 nM siRNA
- Designed for automated procedures
- Reproducible at all levels
- Cost effective, using only a small volume of reagent per well

1,5 ml of INTERFERin®-HTS is sufficient to transfect 200 to 300 96-well plates.

Description	Pk	Cat. No.
INTERFERin®-HTS siRNA transfection reagent, 0,2 ml	200 µl	**410-002**
INTERFERin®-HTS siRNA transfection reagent, 1,5 ml	1,5 ml	**410-015**
INTERFERin®-HTS DNA and siRNA transfection reagent, 4×1,5 ml	6 ml	**410-060**

HTS DNA transfection reagent, jetPEI®

Polyplus-transfection

jetPEI® transfection reagent is a linear polyethylenimine derivative, free of components of animal origin, providing highly effective and reproducible gene delivery. jetPEI® transfection reagent is particularly well suited for automated or manual High Throughput Screening (HTS) with three protocols available: Reverse, batch and forward.

- Fast and efficient methods to transfect cells for HTS
- Exceptionally reproducible results
- Well suited for automation
- Compatible with serum and antibiotics
- Reverse, batch and forward protocols available

Delivery information: 150 mM NaCl sterile complex-formation solution is required to dilute the reagent and DNA. 1 ml of jetPEI® transfection reagent is sufficient to perform 2000 transfections in 96-well plates.

Description	Pk	Cat. No.
jetPEI® HTS DNA transfection reagent, 0,1 ml, with 5 ml NaCl solution	100 µl	**101-01N**
jetPEI® HTS DNA transfection reagent, 1 ml, with 50 ml NaCl solution	1 ml	**101-10N**
jetPEI® HTS DNA transfection reagent, 4×1 ml, with 4×50 ml NaCl solution	4 ml	**101-40N**
jetPEI® HTS DNA transfection reagent, 10 ml, with 2×250 ml NaCl solution	10 ml	**101B-010N**

DNA/siRNA delivery reagent, *in vivo*-jetPEI®

Polyplus-transfection

in vivo-jetPEI® reagent provides versatile, reproducible and reliable delivery of nucleic acid (DNA and siRNA) in animal models, for functional studies and RNA interference experiments using various administration routes. It is also well suited as a delivery vehicle for therapeutic approaches, including gene therapy, genetic vaccination, immune therapy and cancer treatment.

- Successful delivery of DNA, siRNA and oligonucleotides *in vivo*
- Multiple modes of administration in many species
- No detectable inflammatory response
- Reproducible results

Delivery information: 10% glucose solution is included. 0,1 ml of *in vivo*-jetPEI® delivery reagent is sufficient to perform up to 20 intravenous injections in mouse with 50 µg of DNA.

Description	Pk	Cat. No.
in vivo-jetPEI® delivery reagent, 0,1 ml, with 10 ml glucose solution (10%)	100 µl	**201-10G**
in vivo-jetPEI® delivery reagent, 0,5 ml, with 2×10 ml glucose solution (10%)	500 µl	**201-50G**

Transfection reagent, PEIpro™

Polyplus-transfection

PEIpro™ is a ready to use 1 mg/ml optimised linear polyethylenimine (PEI) reagent for the production of recombinant proteins by Transient Gene Expression (TGE) in suspension-adapted mammalian cell lines cultivated in shaker flasks, platform shakers or stirred tank bioreactors. PEIpro™ can also be used for viral vector production (lentiviruses, adenoviruses, AAV, etc.) using cell lines cultivated in serum-free culture media.

PEIpro™ undergoes full chemical testing and is compliant with the regulatory guidelines for raw materials used in bioproduction. The reagent is supplied with advanced quality controls including a specific transfection efficiency test that ensures excellent lot-to-lot consistency, and an implied license statement.

Description	Pk	Cat. No.
PEIpro™ transfection reagent	10 ml	**115-010**
PEIpro™ transfection reagent	375 ml	**115-375**
PEIpro™ transfection reagent	1 l	**115-01L**

For bioproduction and research use only. Not intended for animal or human diagnostic or therapeutic use.

Electroporation system, ECM® 399
BTX

The ECM® 399 is an exponential decay wave electroporation system specifically designed (in High Voltage Mode) to deliver the field strengths and pulse lengths required for the simple transformation of bacterial and yeast cells. In Low Voltage Mode the ECM® 399 has also been used for limited transfections of mammalian cells.

- Simple three-step operation: Switch on, dial in voltage and deliver pulse
- Compact and portable

Delivery information: Each complete system includes ECM® 399 generator with universal power supply, PEP (Personal Electroporation Pack) plug-in cuvette module, cuvettes (10 each of 1 mm, 2 mm and 4 mm gap sizes), and cuvette rack.

Capacitance in High Voltage Mode	36 µF
Capacitance in Low Voltage Mode	1050 µF
Charge time	5 seconds maximum
Controls	Single rotary encoded for voltage selection; additional on/off power and start switches
Display	16-character LCD backlit
Interfaces	Digital user interface
Operational status	Internal self test upon start-up
Resistance	150 ohms
Safety	Short circuit and arc proof
Voltage range High Voltage Mode / 10 V resolution	10 - 2500 V
Voltage range Low Voltage Mode / 2 V resolution	2 - 500 V
Weight (kg)	3.2
W×D×H (mm)	230×195×110

Description	Pk	Cat. No.
ECM® 399 electroporation system, complete	1	**732-0003**
ECM® 399 generator only	1	**732-0036**

Description	Pk	Cat. No.
Accessories		
Personal Electroporation Pack	1	**700-4850**

Electroporation system, ECM® 630
BTX

The ECM® 630 is a powerful exponential decay wave electroporation system designed for *in vitro* and *in vivo* electroporation applications, including mammalian and plant cell transfections, drug delivery and bacteria and yeast transformations.

- Precision Pulse™ provides the user with full flexibility in choosing a wide range of time constants
- Over 200 protocols are available, including the ability to reproduce protocols from electroporators from other manufacturers

Delivery information: Each complete system includes ECM® 630 generator with universal power supply, safety stand, cuvettes (10 each of 1 mm, 2 mm and 4 mm gap sizes), and cuvette rack.

Amperage limit HV mode	3000 A
Amperage limit LV mode	6000 A
Charge time	5 seconds maximum
Display	20×4-character LCD
Interfaces	Digital user interface
Precision Pulse™ time constants HV mode	284 RC
Precision Pulse™ time constants LV mode	>8500 RC
Safety	Short circuit proof
Voltage range High Voltage Mode / 5 V resolution	50 - 2500 V
Voltage range Low Voltage Mode / 1 V resolution	10 - 500 V
Weight (kg)	4,5
W×D×H (mm)	140×318×311

Description	Pk	Cat. No.
ECM® 630 electroporator, complete	1	**732-0022**
ECM® 630 generator only	1	**732-0037**

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Electroporation system, ECM® 830
BTX

The ECM® 830 is a square wave electroporation system designed for all *in vitro and in vivo* electroporation applications, including mammalian and plant cell transfections, embryo manipulation, nuclear transfer, and bacterial and yeast transformations.

- Square wave technology offers the ability to transfect cells efficiently and with higher cell viabilities
- User control of all parameters gives ultimate flexibility in protocols

Optional footswitch functions in place of the start button on the front of the generator. It allows hands-free operation of the ECM® 830 generator, which is particularly useful when conducting *in vivo/in ovo* gene delivery, or nuclear transfer/cloning when both hands are needed for sample manipulation.

Delivery information: Each complete system includes ECM® 830 generator with universal power supply, safety stand, cuvettes (10 each of 1 mm, 2 mm and 4 mm gap sizes), and cuvette rack.

Capacitance in High Voltage Mode	110 µF
Capacitance in Low Voltage Mode	4000 µF
Charge time	13 seconds maximum
Display	20×4-character LCD
Interfaces	Digital user interface
Pulse length range, HV mode/1 µs resolution	10 - 600 µs
Pulse length range, LV mode/0.1 s resolution	1 - 10 s
Pulse length range, LV mode/1 ms resolution	1 - 999 ms
Pulse length range, LV mode/1 µs resolution	10 - 999 µs
Safety	Arc Quenching™
Voltage range High Voltage Mode / 5 V resolution	505 - 3000 V
Voltage range Low Voltage Mode / 1 V resolution	5 - 500 V
Weight (kg)	6,8
W×D×H (mm)	140×318×311

Description	Pk	Cat. No.
ECM® 830 electroporation system, complete	1	**732-0024**
ECM® 830 generator only	1	**732-0038**

Description	Pk	Cat. No.
Accessories		
Footswitch, model 1250FS	1	**732-0026**

Multi-well plate electroporators, High Throughput HT 25 and HT 96 well systems
BTX

The High Throughput (HT) 25- or 96-well systems are designed for rapid processing of multiple samples. Applications include tranfection of mammalian cells, transformation of bacteria and yeast, and siRNA and cDNA library screening.

Each HT plate consists of either 96 or 25 individual wells with integrated electrodes. Four different plate formats are available: 96-well with 4 mm gap, 96-well with 2 mm gap, 25-well with 4 mm gap and 25-well with 2 mm gap. The plate handler fits both HT 25 and HT 96 plates and delivers the pulse parameters set in either the ECM® 830 or ECM® 630 generators to the plate. Two plate handlers are available: HT-200 delivers the applied pulse column by column automatically, HT-100 requires manual switching from one column to the next. Both plate handlers apply the same settings to each well within a column. The third component of the HT system is the electroporation generator, which supplies the pulse to the plate handler. The choice of electroporation generator is based on application needs.

- Multiple samples can be run in seconds, allowing rapid optimisation of electroporation variables and high sample throughput
- Complete user control over electroporation settings allows great flexibility
- Saves valuable lab time, moving experiments through faster, and providing reliable results without the need for expensive reagents
- Eliminates cross-contamination with integrated electrodes and plate sealer

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Description	Pk	Cat. No.
HT 25 with ECM® 830 generator, HT 100 plate handler, and 6×25-well plates (4 mm gap size)	1	732-0341
HT 25 with ECM® 830 generator, HT 200 plate handler, and 6×25-well plates (4 mm gap size)	1	732-0342
HT 25 with ECM® 630 generator, HT 100 plate handler, and 6×25-well plates (4 mm gap size)	1	732-0472
HT 25 with ECM® 630 generator, HT 200 plate handler, and 6×25-well plates (4 mm gap size)	1	732-0473
HT 96 with ECM® 830 generator, HT 100 plate handler, and 2×96-well plates (4 mm gap size)	1	732-0343
HT 96 with ECM® 830 generator, HT 200 plate handler, and 2×96-well plates (4 mm gap size)	1	732-0344
HT 96 with ECM® 630 generator, HT 100 plate handler, and 2×96-well plates (4 mm gap size)	1	732-0474
HT 96 with ECM® 630 generator, HT 200 plate handler, and 2×96-well plates (4 mm gap size)	1	732-0475

Description	Pk	Cat. No.
Accessories		
HT-100 plate handler, manual column switching	1	732-0361
HT-200 plate handler, automatic column switching	1	732-0362
Electroporation plates, 96-well, 2 mm gap, 125 µl	1	732-0476
Electroporation plates, 96-well, 4 mm gap, 250 µl	1	732-0477
Electroporation plates, 25-well, 4 mm gap, 250 µl	1	732-0345
Electroporation plates, 25-well, 4 mm gap, 250 µl	6	732-0479
Electroporation plates, 25-well, 2 mm gap, 125 µl	1	732-0480
Electroporation plates, 25-well, 2 mm gap, 125 µl	6	732-0481

Electro cell manipulator, ECM® 2001

BTX

The ECM® 2001 is a multifunctional electro cell manipulation and electrofusion instrument. It generates an AC waveform for benign dielectrophoretic alignment of cells. With microsecond switch-over time from AC to DC, efficient fusion can take place. After fusion AC re-application keeps cells together for the rounding off process. The DC square pulse section can be used as a stand-alone electroporation system with a wide range of voltages and pulse lengths capable of operating into low impedence loads.

- Versatile system suitable for electro cell fusion, embryo manipulation and/or electroporation
- Microprocessor controlled precision
- Wide range of parameters

AC parameters (alignment)	
Frequency (MHz)	1, fixed
Voltage (VRMS)	0 - 75
Duration (sec)	0 - 99
Post fusion AC amplitude	1/10 of prefusion amplitude
Post fusion AC duration (sec)	1 - 9
Pause between AC/DC (µsec)	50
DC pulse parameters (fusion/electroporation)	
High voltage mode (HV mode):	
Voltage (V)	500 - 3000
Pulse length (µsec)	0 - 99
Low voltage mode (LV mode):	
Voltage	10 - 500
Pulse length (msec)	0,01 - 0,99, 1 - 99
Weight (kg)	22
W×D×H (mm)	432×394×280

Description	Pk	Cat. No.
Electroporation system*, ECM® 2001EP	1	732-0802
Embryo manipulation system**, ECM® 2001EM	1	732-0615
Electro cell fusion system***, ECM® 2001EF	1	732-0616

Description	Pk	Cat. No.
Accessories		
Electro cell fusion/embryo manipulator, ECM® 2001, generator only	1	732-0617

* Includes ECM® 2001 generator, disposable cuvettes (1 mm, 2 mm and 4 mm gap sizes), safety stand and cuvette rack.
** Includes ECM® 2001 generator, microslides (10 each with 0,5 mm, 1,0 mm and 1 each with 3,2 mm gap), micrograbber cables and coaxial banana plug cables.
*** Includes ECM® 2001 generator, microslides (10 each with 0,5 mm and 1 each with 3,2 mm gap), micrograbber cables, meander fusion chamber (0,2 mm gap on glass microslide, including connector), flat electrode/divergent field (1,0 mm gap, 0,5 ml divergent field geometry), electrode adapter, coaxial banana plug cable.

Electroporation cuvettes

The VWR electroporation cuvettes are made from clear, medical grade polycarbonate and are compatible with all common commercially available electroporators. Available in 3 gap sizes to meet common application requirements - 1 mm for highest field strength, suitable for bacteria; 2 mm gap for intermediate requirements; 4 mm gap for lowest field strength, suitable for mammalian cells and some plant cells.

- Sterilised by gamma irradiation and individually packaged for assured sterility
- Polished aluminium lowers arcing frequency
- Colour coded caps for easy identification of gap sizes
- Round caps for easy, single handed cap removal

Description	Volume (µl)	Pk	Cat. No.
Cuvettes with 1 mm gap size, grey cap	20 - 90	50	**732-1135**
Cuvettes with 2 mm gap size, blue cap	40 - 400	50	**732-1136**
Cuvettes with 4 mm gap size, yellow cap	80 - 800	50	**732-1137**

Electroporation cuvettes
Thermo Scientific

PC, sterile, individually wrapped

Compatible with all common electroporators. Available in 3 gap sizes: 1 mm (white cap) delivers pulses with the highest field strength and is ideal for bacterial cells; 2 mm (blue cap) generates pulses at medium field strength and works well with yeast cells; 4 mm (green cap) produces pulses with the lowest field strength, which is best suited for mammalian cells.

- Precise gap tolerances ensure reproducible field strength delivery and high transformation efficiency
- Consistent chamber shape made from seamless plastic moulding eliminates leaks and keeps the aluminium plates parallel for uniform sample treatment and safety
- Colour-coded, frosted caps allow easy labelling and recognition
- Caps are snug fitting to ensure sterility is maintained

Description	Pk	Cat. No.
Cuvettes with 1 mm gap size, white cap	50	**732-2267**
Cuvettes with 2 mm gap size, blue cap	50	**732-2268**
Cuvettes with 4 mm gap size, green cap	50	**732-2269**

Electroporation cuvettes, Cuvettes Plus™
BTX

High quality, disposable cuvettes for transfection or transformation of all cell types. Available in three gap sizes: 1.0 mm (for bacterial cells), 2.0 mm (for bacteria, plant or mammalian cells) or 4.0 mm (mammalian and plant cells), these cuvettes are compatible with most electroporation systems.

- Three cuvette sizes to suit all applications
- Packaged with a transfer pipette for the fast and easy removal of samples and gamma irradiated together for sterility
- Cuvette caps are round for easy, one-handed removal, and are colour-coded for quick identification
- Polished aluminium electrodes in the cuvettes lowers arcing frequency
- Cuvettes (without cap) are autoclavable

Delivery information: Each sterilised package includes a disposable cuvette and a bonus pipette, which is used for complete removal of the sample after electroporation.

Description	Volume (µl)	Pk	Cat. No.
Cuvettes with 1,0 mm gap size, grey cap	20 - 70	50	**732-0020**
Cuvettes with 2,0 mm gap size, blue cap	40 - 400	50	**732-0021**
Cuvettes with 4,0 mm gap size, yellow cap	80 - 800	50	**732-0023**

Electrodes, Genetrodes™
BTX

Genetrodes™ are paired, reusable, needle style electrodes that are ideal for *in vivo* and *in ovo* electroporation applications, including drug and gene delivery.

- Five models to suit the size and shape of the target electroporation area
- Each model consists of a pair of electrodes configured as either straight or bent L-shaped electrodes with gold tips
- The electrodes are placed into tissue following injection of the molecule of interest, and an electroporation pulse is delivered using an electroporation generator
- The electric field introduced by the Genetrodes™ causes transient pores to form in the cells of the tissue, allowing uptake of the molecules into cells
- Genetrodes™ are positioned in parallel at a predetermined gap in tissue using the Genetrode/ Genepaddle holder

Generator compatibility: ECM® 830, ECM® 2001

Voltage range: 0 - 200 V DC

Pulse length range: 10 µsec to 99 msec in PBS

Pulse number range: 1 - 99 (depending on voltage and pulse length settings)

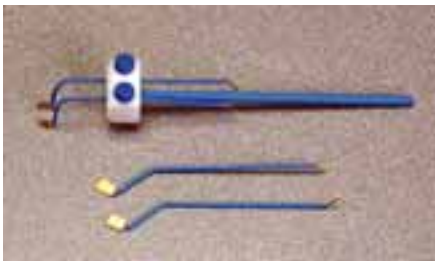
Genetrode™ holder electrode gap: 1 - 10 mm range

Description	Application	Pk	Cat. No.
In vivo Genetrode™, straight, 5 mm*	*in vivo*	1	**732-0010**
In vivo Genetrode™, straight, 10 mm*	*in vivo*	1	**732-0011**
In ovo Genetrode™, bent L-shaped, 5 mm*	*in ovo*	1	**732-0012**
In ovo Genetrode™, bent L-shaped, 3 mm*	*in ovo*	1	**732-0013**
In ovo Genetrode™, bent L-shaped, 1 mm*	*in ovo*	1	**732-0014**

Description	Pk	Cat. No.
Accessories		
Genetrode/Genepaddle holder	1	**732-0028**

* Requires Genetrodes/Genepaddle holder, square post cables and coaxial banana plug cable.

Electrodes, Genepaddles
BTX



Genepaddles are non invasive, paddle-style, reusable electrodes designed for *in vivo* and *in vitro* applications, such as gene delivery (IVEGD) in mouse embryos. The electrodes are placed anterior and posterior to the embryo following injection of the molecule of interest, and an electroporation pulse is delivered.

- Gold plated rectangular paddles, available in two sizes 3×5 mm or 5×7 mm
- Genepaddles may be positioned in parallel at a predetermined gap in tissue using the Genetrode/ Genepaddle holder

Generator compatibility: ECM® 830, ECM® 2001

Voltage range: 0 - 200 V DC (do not use AC)

Pulse length range: 10 µsec to 99 msec in PBS

Pulse number range: 1 - 99 (depending on voltage and pulse length settings)

Genetrode™ holder electrode gap: 1 - 10 mm range

Description	Pk	Cat. No.
Genepaddles, 3×5 mm paddles*	1	**732-0950**
Genepaddles, 5×7 mm paddles*	1	**732-0032**

Description	Pk	Cat. No.
Accessories		
Genetrode/Genepaddle holder	1	**732-0028**

* Requires Genetrodes/Genepaddle holder, square post cables and coaxial banana plug cable

Electrodes, Tweezertrodes™
BTX

Tweezertrodes™ are reusable, tweezer style electrodes for *in vivo* drug or gene delivery applications. Tweezertrodes™ consist of a standard 11,5 cm long tweezer modified with stainless steel circular disc electrodes inserted at the tip. Following injection of the molecule of interest, the electrode discs grasp the target tissue and an electroporation pulse is delivered, initiating pore formation and incorporation of the molecules into the tissue cells that are in direct contact with the electrode.

- The gap between the electrodes may be adjusted up to 2 cm and have a positive electrode indicator
- Choice of 7 mm or 10 mm diameter electrode
- Platinum Tweezertrodes™ are also available, please enquire for further details

Generator compatibility: ECM® 830, ECM® 2001

Voltage range: 0 - 1,0 KV

Pulse length range: 10 µsec to 99 msec in PBS

Description	Pk	Cat. No.
Tweezertrode™ electrode*, 7 mm diameter	1	**732-0015**
Tweezertrode™ electrode*, 10 mm diameter	1	**732-0016**
Tweezertrode™ electrode kit, 7 mm diameter, includes connection cable	1 KIT	**732-0934**
Tweezertrode™ electrode kit, 10 mm diameter, includes connection cable	1 KIT	**732-0951**

Description	Pk	Cat. No.
Accessories		
Banana adapter cable	1	**732-0017**

* Requires Tweezertrode™ connection cable, please contact your local VWR office for further details

Caliper electrodes
BTX

Calliper electrodes are reusable, calliper-style electrodes for a variety of *in vivo* applications such as drug or gene delivery. Calliper electrodes consists of a calliper and a pair of plate electrodes. Two models are available. The 1×1 cm callipers with brass electrode plates are used for smaller animals. The larger callipers are supplied with two pairs of stainless steel electrode plates, 1,5×1,5 cm or 2×2 cm, and are used for larger surface areas.

- The electrode plates can be adjusted by using the roller mounted on the calliper
- The electrodes clasp the target tissue area following injection of the molecule of interest and electroporation pulses are delivered using a BTX generator
- The electric field introduced by the calliper electrodes causes transient pores to form in the cells of the tissue, allowing uptake of the molecules into cells

Generator compatibility: ECM® 830, ECM® 2001

Voltage range: 0 - 500 V (depending on electrode gap)

Pulse length range: 10 µsec to 99 msec (multiple pulsing permitted)

Electrode gap: 0.1 to 13 cm

Description	Pk	Cat. No.
Caliper electrode, brass, 1×1 cm	1	**732-0001**
Caliper electrode, stainless steel, 2×2 cm (additional electrode 1,5×1,5 cm included)	1	**732-0002**

Electrodes, 2-Needle Array™
BTX

Stainless steel electrode, delrin handle

2-Needle Array™ electrodes are needle-style electrodes specifically designed for *in vivo* drug or gene delivery applications. The electrode consists of a reusable 2-Needle Array™ handle and sterile, disposable, 2-needle arrays. The electrode is available in two sizes. The 5 mm 2-needle array and handle is recommended for small muscle masses such as mouse tibialis. The 10 mm 2-needle array and handle is recommended for larger muscle masses such as rat gastronemus.

- Simple, inexpensive and safe non viral technique for *in vivo* gene transfer by the direct injection of plasmid DNA into muscle

Generator compatibility: ECM® 830, ECM® 2001

Voltage range: 0 - 500 V

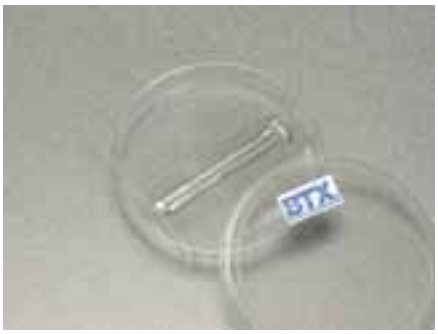
Pulse length range: 10 µsec to 99 msec in PBS

Handle length: 8 cm

Needle length: 20 mm

Description	Pk	Cat. No.
2-Needle Array™ handle, 10 mm gap	1	**732-0029**
2-Needle Array™, 10 mm gap (requires 2-Needle Array™ handle)	6	**732-0018**
2-Needle Array™ handle, 5 mm gap	1	**732-0030**
2-Needle Array™, 5 mm gap (requires 2-Needle Array™ handle)	6	**732-0019**

Microslides
BTX



Microslides have been used for embryo manipulation and cell or protoplast fusion. The Microslide fits on the microscope allowing observation of the alignment and fusion process. The Microslides are composed of a glass slide and either two strips of stainless steel tubing, which function as electrodes to provide a divergent field, or stainless steel square bars that are set apart at various gaps to provide homogeneous fields.

Generator compatibility: ECM® 830 and ECM® 2001

Field type: Divergent (Microslide with 0,5 or 1,0 mm gap) or homogeneous (Microslide with 3,2 or 10,0 mm gap)

Description	Pk	Cat. No.
Microslide 450, 0,5 mm gap, 20 µl*	10	**732-0004**
Microslide 450-1, 1,0 mm gap, 40 µl*	10	**732-0005**
Microslide 453, 3,2 mm gap, 0,7 ml*	1	**732-0006**
Microslide 453-10, 10 mm gap, 2,2 ml*	1	**732-0007**

* Requires square post cables and coaxial banana plug cable, please contact your local VWR office for further details

Electroporation solution kits, BTXpress™
BTX

The BTXpress™ is a single buffer solution, developed to quickly and efficiently deliver genes into mammalian cells that were previously considered "hard to transfect" by chemical and other non viral methods. Transfection using this high performance electroporation solution is equally effective in delivering DNA as well as siRNA into mammalian cells.

As a universal solution the BTXpress™ electroporation reagent can be used with electroporation generators, including Amaxa™ Nucleofector®.

- High efficiency transfection of cell lines and previously considered "hard to transfect" cells
- Low toxicity resulting in improved cell viability
- One buffer used in place of standard electroporation buffers for all mammalian cell types
- Versatility of choosing electroporation optimisation settings for the highest transfection efficiency with BTX instruments
- Increased numbers of tranfections per kit providing better value

Delivery information: BTXpress™ high performance electroporation solution is supplied either as a kit, which includes the BTX Plus cuvettes with transfer pipettes, or as a buffer alone.

Description	Pk	Cat. No.
Kit: 5 ml BTXpress™ solution and 50× 2 mm gap cuvettes with transfer pipettes, 50 reactions	1 KIT	**732-1280**
Kit: 5 ml BTXpress™ solution and 20× 4 mm gap cuvettes with transfer pipettes, 20 reactions	1 KIT	**732-1281**
BTXpress™ solution: 5 ml bottle for up to 50 reactions (without cuvettes)	5 ml	**732-1284**
Kit: 10 ml BTXpress™ solution and 100× 2 mm gap cuvettes with transfer pipettes, 100 reactions	1 KIT	**732-1282**
Kit: 10 ml BTXpress™ solution and 40× 4 mm gap cuvettes with transfer pipettes, 40 reactions	1 KIT	**732-1283**
BTXpress™ solution: 10 ml bottle for up to 100 reactions (without cuvettes)	10 ml	**732-1285**

Horizontal electrophoresis systems, kuroGEL Mini 6

The kuroGEL range of horizontal electrophoresis units are ideal for screening and analysis of a wide range of samples, including PCR products, DNA mini-preps, plasmid vectors and restriction fragments. The compact size of the Mini and Mini Plus models optimises gel conditions allowing fast resolution of nucleic acids. Midi units accommodate standard gels for medium throughput analysis and the preparation of nucleic acids. Maxi and Maxi Plus units are available in standard and cooled formats designed for the rapid, medium-to-high throughput screening of nucleic acids, such as HLA typing in population genetics studies. All models are supplied complete with tank, casting tray, 1 mm thick combs and coloured loading strips.

- Robust acrylic tank construction with 12 mm thick walls
- Safety lid with integral power leads compatible with low to medium voltage power supplies
- Durable, high impact polystyrene combs
- Colour coded combs corresponding to 1,0, 1,5 and 2,0 mm thicknesses

kuroGEL Mini 6

The kuroGEL Mini 6 Horizontal is ideal for routine preparatory and analytical electrophoresis techniques.

- Short 6 cm gel length for rapid separations
- Coloured loading strips for easy well detection when loading
- Compact tank reduces the buffer volume required to cover the gel, providing greater control over the voltage gradient and run time
- UV transparent acrylic casting tray allows the user to handle the gel on the transilluminator with minimum risk of exposure to hazardous ethidium bromide
- Side handles allow safe and easy transportation around the laboratory

Gel tank supplied with removable casting tray; 2×1,0 mm thick, eight-sample combs; and coloured loading strips.

Combs for kuroGEL Mini 6

Combs are colour coded and height adjustable, offering complete control over loading volume and well depth to a maximum 32-sample throughput.

Comb slots: 2; comb thickness: 1,0, 1,5 or 2,0 mm; comb throughput: 8 to 16 samples.

Accessories for kuroGEL Mini 6

In-tank casting options: Silicone gaskets lining the casting tray form a leakproof seal against the inner walls of the running chamber when the casting tray is turned at 90° to the direction of electrophoresis; 6 cm long Super-Seals offer versatility in casting, allowing the gel length to be tailored to the personal requirements of the user.

External casting options: Silicone casting gates slot into the grooves at each end of the casting tray to form a leak-free seal; silicone gaskets seated in the groove of each casting tray form a leak-free seal against the walls of the casting unit, allowing three gels to be cast simultaneously.

Coloured loading strips (optional) aid visualisation during gel loading. Available in three different colours for easy visualisation of samples mixed with dyes such as bromophenol and xylene cyanol. Each colour strip has an adhesive backing allowing it to be easily affixed and removed with each application.

Gel scoops (optional) are ideal for safe and easy transfer of gels from staining or destaining tanks to a transilluminator or similar surface.

Model	kuroGEL Mini 6
Gel size W×L (mm)	60×75
Sample capacity	32
Buffer volume (ml)	325
Power output shrouded, connectors (Ø mm)	4
Recommended running voltage (V)	70 - 90
Unit W×L×H (mm)	130×240×65

Description	Pk	Cat. No.
Horizontal gel unit, kuroGEL Mini 6, 6×7,5 cm	1	**700-0015**

Description	Pk	Cat. No.
Combs for kuroGEL Mini 6		
Comb, 8 sample wells, 1,0 mm, for kuroGEL Mini 6	1	**700-0025**
Comb, 12 sample wells, 1,0 mm, for kuroGEL Mini 6*	1	**700-0026**
Comb, 16 sample wells, 1,0 mm, for kuroGEL Mini 6	1	**700-0027**
Comb, 8 sample wells, 1,5 mm, for kuroGEL Mini 6	1	**700-0028**
Comb, 12 sample wells, 1,5 mm, for kuroGEL Mini 6*	1	**700-0029**
Comb, 16 sample wells, 1,5 mm, for kuroGEL Mini 6	1	**700-0030**
Comb, 8 sample wells, 2,0 mm, for kuroGEL Mini 6	1	**700-0031**
Comb, 12 sample wells, 2,0 mm, for kuroGEL Mini 6*	1	**700-0032**
Comb, 16 sample wells, 2,0 mm, for kuroGEL Mini 6	1	**700-0033**
Accessories		
Gel casting tray for kuroGEL Mini 6, 6×7.5 cm	1	**700-0016**
Casting gate, silicone, for kuroGEL Mini 6 casting tray	2	**700-0017**
Gasket, silicone for all kuroGEL units, 1 m, cut to fit	1	**700-0018**
Casting gate Super-Seals for kuroGEL Mini 6 casting tray	2	**700-0019**
Coloured loading strips for kuroGEL Mini 6	12	**700-0020**
Casting base, external, for 3-gel casting trays for kuroGEL Mini 6	1	**700-0021**
Gel scoop for 6 cm wide gel transfer	1	**700-0022**
Electrode replacement part, 50 cm, for all kuroGEL units	2	**700-0023**

*Multi channel pipette compatible

Horizontal electrophoresis systems, kuroGEL Mini Plus 10

The kuroGEL range of horizontal electrophoresis units are ideal for screening and analysis of a wide range of samples, including PCR products, DNA mini-preps, plasmid vectors and restriction fragments. The compact size of the Mini and Mini Plus models optimises gel conditions allowing fast resolution of nucleic acids. Midi units accommodate standard gels for medium throughput analysis and the preparation of nucleic acids. Maxi and Maxi Plus units are available in standard and cooled formats designed for the rapid, medium-to-high throughput screening of nucleic acids, such as HLA typing in population genetics studies. All models are supplied complete with tank, casting tray, 1 mm thick combs and coloured loading strips.

- Robust acrylic tank construction with 12 mm thick walls
- Safety lid with integral power leads compatible with low to medium voltage power supplies
- Durable, high impact polystyrene combs
- Colour coded combs corresponding to 1,0, 1,5 and 2,0 mm thicknesses

kuroGEL Mini Plus 10

The kuroGEL Mini Plus 10 Horizontal is ideal for routine preparatory and analytical electrophoresis techniques.

- Coloured loading strips for easy well detection when loading
- Compact tank reduces the buffer volume required to cover the gel, providing greater control over the voltage gradient and run time
- UV transparent acrylic casting tray allows the user to handle the gel on the transilluminator with minimum risk of exposure to hazardous ethidium bromide
- Side handles allow safe and easy transportation around the laboratory

Gel tank supplied with removable casting tray; 2×1,0 mm thick, 16-sample combs; and coloured loading strips.

Combs for kuroGEL Mini Plus 10

Combs are colour coded and height adjustable, offering complete control over loading volume and well depth to a maximum 80-sample throughput. Four comb positions at 2.5 cm intervals along the tray for swift separation of multiple samples.

Comb slots: 4; comb thickness: 1,0, 1,5 or 2,0 mm; comb throughput: 8 to 20 samples.

Accessories for kuroGEL Mini Plus 10

In-tank casting options: Silicone gaskets lining the casting tray form a leakproof seal against the inner walls of the running chamber when the casting tray is turned at 90° to the direction of electrophoresis; 10 cm long Super-Seals offer total versatility in casting, allowing the gel length to be tailored to the personal requirements of the user.

External casting options: Silicone casting gates slot into the grooves at each end of the casting tray to form a leak-free seal; silicone gaskets seated in the groove of each casting tray form a leak-free seal against the walls of the casting unit, allowing three gels to be cast simultaneously.

Coloured loading strips (optional) aid visualisation during gel loading. Available in three different colours for easy visualisation of samples mixed with dyes such as bromophenol and xylene cyanol. Each colour strip has an adhesive backing allowing it to be easily affixed and removed with each application.

Gel scoops (optional) are ideal for safe and easy transfer of gels from staining or destaining tanks to a transilluminator or similar surface.

Model	kuroGEL Mini Plus 10
Gel size W×L (mm)	100×115
Sample capacity	80
Buffer volume (ml)	450
Power output shrouded, connectors (Ø mm)	4
Recommended running voltage (V)	75 - 125
Unit W×L×H (mm)	165×230×65

Description	Pk	Cat. No.
Horizontal gel unit, kuroGEL Mini Plus 10, 10×11,5 cm	1	**700-0034**

Description	Pk	Cat. No.
Combs for kuroGEL Mini Plus 10		
Comb, 8 sample wells, 1,0 mm, for kuroGEL Mini Plus 10	1	**700-0041**
Comb, 10 sample wells, 1,0 mm, for kuroGEL Mini Plus 10*	1	**700-0042**
Comb, 12 sample wells, 1,0 mm, for kuroGEL Mini Plus 10	1	**700-0043**
Comb, 16 sample wells, 1,0 mm, for kuroGEL Mini Plus 10	1	**700-0044**
Comb, 20 sample wells, 1,0 mm, for kuroGEL Mini Plus 10*	1	**700-0045**
Comb, 8 sample wells, 1,5 mm, for kuroGEL Mini Plus 10	1	**700-0046**
Comb, 10 sample wells, 1,5 mm, for kuroGEL Mini Plus 10*	1	**700-0047**
Comb, 12 sample wells, 1,5 mm, for kuroGEL Mini Plus 10	1	**700-0048**
Comb, 16 sample wells, 1,5 mm, for kuroGEL Mini Plus 10	1	**700-0049**
Comb, 20 sample wells, 1,5 mm, for kuroGEL Mini Plus 10*	1	**700-0050**
Comb, 8 sample wells, 2,0 mm, for kuroGEL Mini Plus 10	1	**700-0051**
Comb, 10 sample wells, 2,0 mm, for kuroGEL Mini Plus 10*	1	**700-0052**
Comb, 12 sample wells, 2,0 mm, for kuroGEL Mini Plus 10	1	**700-0053**
Comb, 16 sample wells, 2,0 mm, for kuroGEL Mini Plus 10	1	**700-0054**
Comb, 20 sample wells, 2,0 mm, for kuroGEL Mini Plus 10*	1	**700-0055**
Accessories		
Gel casting tray for kuroGEL Mini Plus 10, 10×11,5 cm	1	**700-0035**
Casting gate, silicone, for kuroGEL Mini Plus 10 casting tray	2	**700-0036**
Casting gate Super-Seals for kuroGEL Mini Plus 10 casting tray	2	**700-0037**

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Description	Pk	Cat. No.
Accessories		
Coloured loading strips for kuroGEL Mini Plus 10	12	**700-0038**
Casting base, external, for 3-gel casting trays for kuroGEL Mini Plus 10	1	**700-0039**
Gel scoop for 10 cm wide gel transfer	1	**700-0040**

*Multi channel pipette compatible

Horizontal electrophoresis systems, kuroGEL Midi 13

The kuroGEL range of horizontal electrophoresis units are ideal for screening and analysis of a wide range of samples, including PCR products, DNA mini-preps, plasmid vectors and restriction fragments. The compact size of the Mini and Mini Plus models optimises gel conditions allowing fast resolution of nucleic acids. Midi units accommodate standard gels for medium throughput analysis and the preparation of nucleic acids. Maxi and Maxi Plus units are available in standard and cooled formats designed for the rapid, medium-to-high throughput screening of nucleic acids, such as HLA typing in population genetics studies. All models are supplied complete with tank, casting tray, 1 mm thick combs and coloured loading strips.

- Robust acrylic tank construction with 12 mm thick walls
- Safety lid with integral power leads compatible with low to medium voltage power supplies
- Durable, high impact polystyrene combs
- Colour coded combs corresponding to 1,0, 1,5 and 2,0 mm thicknesses

kuroGEL Midi 13

The kuroGEL Midi 13 Horizontal gel electrophoresis unit is ideal for analytical and preparative studies of nucleic acids.

- Buffer recirculation ports that can be connected to a peristaltic pump for buffer recirculation during electrophoresis to maintain buffer pH and prevent ionic gradient formation
- Coloured loading strips, for easy well detection when loading
- Compact tank, reduces the buffer volume required to cover the gel, providing greater control over the voltage gradient and run time
- UV-transparent acrylic casting tray, allowing the user to handle the gel on the transilluminator with minimum risk of exposure to hazardous ethidium bromide
- Side handles, for safe and easy transportation around the laboratory

Gel tank supplied with removable casting tray; 2×1,0 mm thick, 16-sample combs; coloured loading strips and buffer recirculation ports.

Combs for kuroGEL Midi 13

Combs are colour coded and height adjustable, offering complete control over loading volume and well depth to a maximum 112-sample throughput. Four comb positions with 3.5 cm intervals along the tray for faster separation of multiple samples.

Comb slots: 4; comb thickness: 1,0, 1,5 or 2,0 mm; comb throughput: 10 to 28 samples.

Accessories for kuroGEL Midi 13

In-tank casting options: Silicone gaskets lining the casting tray form a leakproof seal against the inner walls of the running chamber when the casting tray is turned at 90° to the direction of electrophoresis; 13 cm long Super-Seals offer total versatility in casting, allowing the gel length to be tailored to the personal requirements of the user.

External casting options: Silicone casting gates slot into the grooves at each end of the casting tray to form a leak-free seal; silicone gaskets seated in the groove of each casting tray form a leak-free seal against the walls of the casting unit, allowing three gels to be cast simultaneously.

Coloured loading strips (optional) aid visualisation during gel loading. Available in three different colours for easy visualisation of samples mixed with dyes such as bromophenol and xylene cyanol. Each colour strip has an adhesive backing allowing it to be easily affixed and removed with each application.

Gel scoops (optional) are ideal for safe and easy transfer of gels from staining or destaining tanks to a transilluminator or similar surface.

Model	kuroGEL Midi 13
Gel size W×L (mm)	128×150
Sample capacity	112
Buffer volume (ml)	900
Power output shrouded, connectors (Ø mm)	4
Recommended running voltage (V)	100 - 125
Unit W×L×H (mm)	200×320×70

Description	Pk	Cat. No.
Horizontal gel unit, kuroGEL Midi 13, 12,8×15 cm	1	**700-0056**

Description	Pk	Cat. No.
Combs for kuroGEL Midi 13		
Comb, 10 sample wells, 1,0 mm, for kuroGEL Midi 13	1	**700-0064**
Comb, 12 sample wells, 1,0 mm, for kuroGEL Midi 13*	1	**700-0065**
Comb, 16 sample wells, 1,0 mm, for kuroGEL Midi 13	1	**700-0066**
Comb, 20 sample wells, 1,0 mm, for kuroGEL Midi 13	1	**700-0067**
Comb, 24 sample wells, 1,0 mm, for kuroGEL Midi 13	1	**700-0068**
Comb, 28 sample wells, 1,0 mm, for kuroGEL Midi 13*	1	**700-0069**
Comb, 10 sample wells, 1,5 mm, for kuroGEL Midi 13	1	**700-0070**
Comb, 12 sample wells, 1,5 mm, for kuroGEL Midi 13*	1	**700-0071**
Comb, 16 sample wells, 1,5 mm, for kuroGEL Midi 13	1	**700-0072**
Comb, 20 sample wells, 1,5 mm, for kuroGEL Midi 13	1	**700-0073**
Comb, 24 sample wells, 1,5 mm, for kuroGEL Midi 13	1	**700-0074**

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Description	Pk	Cat. No.
Combs for kuroGEL Midi 13		
Comb, 28 sample wells, 1,5 mm, for kuroGEL Midi 13*	1	**700-0075**
Comb, 10 sample wells, 2,0 mm, for kuroGEL Midi 13	1	**700-0076**
Comb, 12 sample wells, 2,0 mm, for kuroGEL Midi 13*	1	**700-0077**
Comb, 16 sample wells, 2,0 mm, for kuroGEL Midi 13	1	**700-0078**
Comb, 20 sample wells, 2,0 mm, for kuroGEL Midi 13	1	**700-0079**
Comb, 24 sample wells, 2,0 mm, for kuroGEL Midi 13	1	**700-0080**
Comb, 28 sample wells, 2,0 mm, for kuroGEL Midi 13*	1	**700-0081**
Accessories		
Gel casting tray for kuroGEL Midi 13, 12.8×15 cm	1	**700-0057**
Electrophoresis buffer recirculation ports for kuroGEL Midi, Midi Plus, Maxi and Maxi Plus	2	**700-0058**
Casting gate, silicone, for kuroGEL Midi 13 casting tray	2	**700-0059**
Casting gate Super-Seals for kuroGEL Midi 13 casting tray	2	**700-0060**
Coloured loading strips for kuroGEL Midi 13	12	**700-0061**
Casting base, external, for 3-gel casting trays for kuroGEL Midi 13	1	**700-0062**
Gel scoop for 13 cm wide gel transfer	1	**700-0063**

*Multi channel pipette compatible

Horizontal electrophoresis systems, kuroGEL Midi Plus 15

The kuroGEL range of horizontal electrophoresis units are ideal for screening and analysis of a wide range of samples, including PCR products, DNA mini-preps, plasmid vectors and restriction fragments. The compact size of the Mini and Mini Plus models optimises gel conditions allowing fast resolution of nucleic acids. Midi units accommodate standard gels for medium throughput analysis and the preparation of nucleic acids. Maxi and Maxi Plus units are available in standard and cooled formats designed for the rapid, medium-to-high throughput screening of nucleic acids, such as HLA typing in population genetics studies. All models are supplied complete with tank, casting tray, 1 mm thick combs and coloured loading strips.

- Robust acrylic tank construction with 12 mm thick walls
- Safety lid with integral power leads compatible with low to medium voltage power supplies
- Durable, high impact polystyrene combs
- Colour coded combs corresponding to 1,0, 1,5 and 2,0 mm thicknesses

kuroGEL Midi Plus 15

The kuroGEL Midi Plus 15 Horizontal standard gel electrophoresis unit provides the most popular comb throughput and tray-size options, but with additional casting options.

- Multi channel pipette compatible combs, with a maximum 30-sample throughput, reduce gel loading time, while preparatory combs enable nucleic acids to be scaled-up for cloning
- Buffer recirculation ports can be connected to a peristaltic pump for buffer recirculation during electrophoresis to maintain buffer pH and prevent ionic gradient formation
- Coloured loading strips for easy well detection when loading
- UV-transparent acrylic casting tray allows the user to handle the gel on the transilluminator with minimum risk of exposure to hazardous ethidium bromide
- Side handles, for safe and easy transportation around the laboratory

Gel tank supplied with removable casting tray; 2×1,0 mm thick, 16-sample combs; coloured loading strips and buffer recirculation ports.

Combs for kuroGEL Midi Plus 15

Combs are colour coded and height adjustable, offering complete control over loading volume and well depth to a maximum 120-sample throughput. Four comb positions with 3,5 cm intervals along the tray for faster separation of multiple samples.

Comb slots: 4; comb thickness: 1,0, 1,5 or 2,0 mm; comb throughput: 10 to 30 samples.

Accessories for kuroGEL Midi Plus 15

Casting options: Casting gates with integral silicone seals effectively seal the tray without the need for tape, provided the silicone gasket faces outwards. 15 cm long Super-Seals offer total versatility in casting, allowing the gel length to be tailored to each user's personal requirements.

Coloured loading strips (optional) aid visualisation during gel loading. Available in three different colours for easy visualisation of samples mixed with dyes such as bromophenol and xylene cyanol. Each colour strip has an adhesive backing allowing it to be easily affixed and removed with each application.

Gel scoops (optional) are ideal for safe and easy transfer of gels from staining or destaining tanks to a transilluminator or similar surface.

Model	kuroGEL Midi Plus 15
Gel size W×L (mm)	150×150
Sample capacity	120
Buffer volume (ml)	1200
Power output shrouded, connectors (Ø mm)	4
Recommended running voltage (V)	100 - 125
Unit W×L×H (mm)	215×335×70

Description	Pk	Cat. No.
Horizontal gel unit, kuroGEL Midi Plus 15, 15×15 cm	1	**700-0082**

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Description	Pk	Cat. No.
Combs for kuroGEL Midi Plus 15		
Comb, 10 sample wells, 1,0 mm, for kuroGEL Midi Plus 15	1	**700-0088**
Comb, 15 sample wells, 1,0 mm, for kuroGEL Midi Plus 15	1	**700-0089**
Comb, 16 sample wells, 1,0 mm, for kuroGEL Midi Plus 15*	1	**700-0090**
Comb, 20 sample wells, 1,0 mm, for kuroGEL Midi Plus 15	1	**700-0091**
Comb, 25 sample wells, 1,0 mm, for kuroGEL Midi Plus 15	1	**700-0092**
Comb, 30 sample wells, 1,0 mm, for kuroGEL Midi Plus 15*	1	**700-0093**
Comb, 10 sample wells, 1,5 mm, for kuroGEL Midi Plus 15	1	**700-0094**
Comb, 15 sample wells, 1,5 mm, for kuroGEL Midi Plus 15	1	**700-0095**
Comb, 16 sample wells, 1,5 mm, for kuroGEL Midi Plus 15*	1	**700-0096**
Comb, 20 sample wells, 1,5 mm, for kuroGEL Midi Plus 15	1	**700-0097**
Comb, 25 sample wells, 1,5 mm, for kuroGEL Midi Plus 15	1	**700-0098**
Comb, 30 sample wells, 1,5 mm, for kuroGEL Midi Plus 15*	1	**700-0099**
Comb, 10 sample wells, 2,0 mm, for kuroGEL Midi Plus 15	1	**700-0130**
Comb, 15 sample wells, 2,0 mm, for kuroGEL Midi Plus 15	1	**700-0131**
Comb, 16 sample wells, 2,0 mm, for kuroGEL Midi Plus 15*	1	**700-0132**
Comb, 20 sample wells, 2,0 mm, for kuroGEL Midi Plus 15	1	**700-0133**
Comb, 25 sample wells, 2,0 mm, for kuroGEL Midi Plus 15	1	**700-0134**
Comb, 30 sample wells, 2,0 mm, for kuroGEL Midi Plus 15*	1	**700-0135**
Accessories		
Gel casting tray for kuroGEL Midi Plus 15, 15×15 cm	1	**700-0083**
Casting gate with integral silicone seals, for kuroGEL Midi Plus 15 casting tray	2	**700-0084**
Casting gate Super-Seals for kuroGEL Midi Plus 15 casting tray	2	**700-0085**
Coloured loading strips for kuroGEL Midi Plus 15	12	**700-0086**
Gel scoop for 15 cm wide gel transfer	1	**700-0087**

*Multi channel pipette compatible

VWR COLLECTION

SELECTED FOR YOU

Horizontal electrophoresis systems, kuroGEL Maxi 20

The kuroGEL range of horizontal electrophoresis units are ideal for screening and analysis of a wide range of samples, including PCR products, DNA mini-preps, plasmid vectors and restriction fragments. The compact size of the Mini and Mini Plus models optimises gel conditions allowing fast resolution of nucleic acids. Midi units accommodate standard gels for medium throughput analysis and the preparation of nucleic acids. Maxi and Maxi Plus units are available in standard and cooled formats designed for the rapid, medium-to-high throughput screening of nucleic acids, such as HLA typing in population genetics studies. All models are supplied complete with tank, casting tray, 1 mm thick combs and coloured loading strips.

- Robust acrylic tank construction with 12 mm thick walls
- Safety lid with integral power leads compatible with low to medium voltage power supplies
- Durable, high impact polystyrene combs
- Colour coded combs corresponding to 1,0, 1,5 and 2,0 mm thicknesses

kuroGEL Maxi 20

The kuroGEL Maxi 20 Horizontal gel electrophoresis unit is ideal for high resolution analytical and preparative studies of nucleic acids. Large format, 20×20 cm, gel tray is ideal for high resolution techniques, such as screening PCR products and RFLP analysis.

- Multi channel pipette compatible combs, with a maximum 42-sample throughput reduce gel loading time
- Buffer recirculation ports can be connected to a peristaltic pump for buffer recirculation during electrophoresis to maintain buffer pH and prevent ionic gradient formation
- Coloured loading strips for easy well detection when loading
- UV-transparent acrylic casting tray allows the user to handle the gel on the transilluminator with minimum risk of exposure to hazardous ethidium bromide
- Side handles, for safe and easy transportation around the laboratory

Gel tank supplied with removable casting tray; 2×1,0 mm thick, 16-sample combs; coloured loading strips and buffer recirculation ports

Combs for kuroGEL Maxi 20

Combs are colour coded and height adjustable, offering complete control over loading volume and well depth to a maximum 168-sample throughput. Four comb positions at 5 cm intervals along the tray for faster separation of multiple samples.

Comb slots: 4; comb thickness: 1,0, 1,5 or 2,0 mm; comb throughput: 16 to 40 samples.

Accessories for kuroGEL Maxi 20

Casting options: Casting gates with integral silicone seals effectively seal the tray without the need for tape, provided the silicone gasket faces outwards. 20 cm long Super-Seals offer total versatility in casting, allowing the gel length to be tailored to each user's personal requirements.

Coloured loading strips (optional) aid visualisation during gel loading. Available in three different colours for easy visualisation of samples mixed with dyes such as bromophenol and xylene cyanol. Each colour strip has an adhesive backing allowing it to be easily affixed and removed with each application.

Gel scoops (optional) are ideal for safe and easy transfer of gels from staining or destaining tanks to a transilluminator or similar surface.

Model	kuroGEL Maxi 20
Gel size W×L (mm)	200×200
Sample capacity	168
Buffer volume (ml)	2200
Power output shrouded, connectors (Ø mm)	4
Recommended running voltage (V)	150 - 175
Unit W×L×H (mm)	270×475×80

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Description	Pk	Cat. No.
Horizontal gel unit, kuroGEL Maxi 20, 20×20 cm	1	**700-0136**

Description	Pk	Cat. No.
Combs for kuroGEL Maxi 20		
Comb, 16 sample wells, 1,0 mm, for kuroGEL Maxi 20	1	**700-0142**
Comb, 20 sample wells, 1,0 mm, for kuroGEL Maxi 20*	1	**700-0143**
Comb, 28 sample wells, 1,0 mm, for kuroGEL Maxi 20	1	**700-0144**
Comb, 40 sample wells, 1,0 mm, for kuroGEL Maxi 20*	1	**700-0145**
Comb, 16 sample wells, 1,5 mm, for kuroGEL Maxi 20	1	**700-0146**
Comb, 20 sample wells, 1,5 mm, for kuroGEL Maxi 20*	1	**700-0147**
Comb, 28 sample wells, 1,5 mm, for kuroGEL Maxi 20	1	**700-0148**
Comb, 40 sample wells, 1,5 mm, for kuroGEL Maxi 20*	1	**700-0149**
Comb, 16 sample wells, 2,0 mm, for kuroGEL Maxi 20	1	**700-0150**
Comb, 20 sample wells, 2,0 mm, for kuroGEL Maxi 20*	1	**700-0151**
Comb, 28 sample wells, 2,0 mm, for kuroGEL Maxi 20	1	**700-0152**
Comb, 40 sample wells, 2,0 mm, for kuroGEL Maxi 20*	1	**700-0153**
Accessories		
Gel casting tray for kuroGEL Maxi 20, 20×20 cm	1	**700-0137**
Casting gate with integral silicone seals, for kuroGEL Maxi 20 casting tray	2	**700-0138**
Casting gate Super-Seals for kuroGEL Maxi 20 casting tray	2	**700-0139**
Coloured loading strips for kuroGEL Maxi 20	12	**700-0140**
Gel scoop for 20 cm wide gel transfer	1	**700-0141**

*Multi channel pipette compatible

VWR COLLECTION

SELECTED FOR YOU

Horizontal electrophoresis systems, kuroGEL Maxi Plus 25

The kuroGEL range of horizontal electrophoresis units are ideal for screening and analysis of a wide range of samples, including PCR products, DNA mini-preps, plasmid vectors and restriction fragments. The compact size of the Mini and Mini Plus models optimises gel conditions allowing fast resolution of nucleic acids. Midi units accommodate standard gels for medium throughput analysis and the preparation of nucleic acids. Maxi and Maxi Plus units are available in standard and cooled formats designed for the rapid, medium-to-high throughput screening of nucleic acids, such as HLA typing in population genetics studies. All models are supplied complete with tank, casting tray, 1 mm thick combs and coloured loading strips.

- Robust acrylic tank construction with 12 mm thick walls
- Safety lid with integral power leads compatible with low to medium voltage power supplies
- Durable, high impact polystyrene combs
- Colour coded combs corresponding to 1,0, 1,5 and 2,0 mm thicknesses

kuroGEL Maxi Plus 25

The kuroGEL Maxi-Plus 25 Horizontal gel electrophoresis unit is ideal for high throughput analysis of nucleic acids. Large format, 25×30 cm, gel tray is ideal for high throughput techniques, such as HLA typing and screening PCR products.

- Multi channel pipette compatible combs, with a maximum 52-sample throughput, allow samples to be loaded quickly and easily from 96- and 384-well thermal cycler blocks
- Buffer recirculation ports can be connected to a peristaltic pump for buffer recirculation during electrophoresis to maintain buffer pH and prevent ionic gradient formation
- Coloured loading strips, for easy well detection when loading
- UV-transparent acrylic casting tray allows the user to handle the gel on the transilluminator with minimum risk of exposure to hazardous ethidium bromide
- Side handles for safe and easy transportation around the laboratory

Gel tank supplied with removable casting tray; 2×1,0 mm thick, 26-sample combs; coloured loading strips and buffer recirculation ports.

Combs for kuroGEL Maxi Plus 25

Combs are colour coded and height adjustable, offering complete control over loading volume and well depth to a maximum 624-sample throughput. Twelve comb positions at 2 cm intervals along the tray for rapid, high throughput separation of multiple samples.

Comb slots: 12; comb thickness: 1,0, 1,5 or 2,0 mm; comb throughput: 26 to 52 samples.

Accessories for kuroGEL Maxi Plus 25

Casting options: Casting gates with integral silicone seals effectively seal the tray without the need for tape, provided the silicone gasket faces outwards. 25 cm long Super-Seals offer total versatility in casting, allowing the gel length to be tailored to each user's personal requirements.

Coloured loading strips (optional) aid visualisation during gel loading. Available in three different colours for easy visualisation of samples mixed with dyes such as bromophenol and xylene cyanol. Each colour strip has an adhesive backing allowing it to be easily affixed and removed with each application.

Gel scoops (optional) are ideal for safe and easy transfer of gels from staining or destaining tanks to a transilluminator or similar surface.

Model	kuroGEL Maxi Plus 25
Gel size W×L (mm)	250×300
Sample capacity	624
Buffer volume (ml)	3000
Power output shrouded, connectors (Ø mm)	4
Recommended running voltage (V)	150 - 200
Unit W×L×H (mm)	330×560×90

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Description	Pk	Cat. No.
Horizontal gel unit, kuroGEL Maxi Plus 25, 25×30 cm	1	700-0154

Description	Pk	Cat. No.
Combs for kuroGEL Maxi Plus 25		
Comb, 26 sample wells, 1,0 mm, for kuroGEL Maxi Plus 25*	1	700-0160
Comb, 52 sample wells, 1,0 mm, for kuroGEL Maxi Plus 25*	1	700-0161
Comb, 26 sample wells, 1,5 mm, for kuroGEL Maxi Plus 25*	1	700-0162
Comb, 52 sample wells, 1,5 mm, for kuroGEL Maxi Plus 25*	1	700-0163
Comb, 26 sample wells, 2,0 mm, for kuroGEL Maxi Plus 25*	1	700-0164
Comb, 52 sample wells, 2,0 mm, for kuroGEL Maxi Plus 25*	1	700-0165
Accessories		
Gel casting tray for kuroGEL Maxi Plus 25, 25×30 cm	1	700-0155
Casting gate with integral silicone seals, for kuroGEL Maxi Plus 25 casting tray	2	700-0156
Casting gate Super-Seals for kuroGEL Maxi 20 casting tray	2	700-0157
Coloured loading strips for kuroGEL Maxi Plus 25	12	700-0158
Gel scoop for 25 cm wide gel transfer	1	700-0159

*Multi channel pipette compatible

Horizontal electrophoresis systems, shiroGEL

Designed for ease of use and safe operation, the shiroGEL horizontal electrophoresis systems and accessories are built to withstand the rigours of everyday use. For leakproof performance the gel boxes and gel trays are moulded from thick acrylic. UV transparent gel trays aid in visualisation of samples. Cassettes protect the electrodes and allow for easy replacement. Gel casting is simple with the durable rubber casting gates. Slots in the sides of the trays allow for easy comb placement. The two piece design of the combs provides for vertical adjustment, giving the user control over the depth of the well. The combs supplied with the systems are 1,5 mm thick. Multiple combs, including those compatible with multi channel pipettes and different thicknesses, are also available. The 'EasyLift' gel box lid is easily removed using the side tabs and pressure pads. The lid is domed, to prevent condensation from dripping onto the gel, and is surrounded by a drip ring, to help recover the condensate and maintain buffer concentration.

- Moulded, durable construction
- Rubber gates for tapeless gel casting
- 'EasyLift' safety lid with buffer recapture system to maintain buffer concentration

Delivery information: Complete system including UV transparent gel tray is supplied with tank, lid, electrodes and 1,5 mm combs.

Model	Mini 10	Midi Plus 10	Midi Plus 15
Gel size W×L (mm)	70×100	150×100	150×150
Sample capacity	64	140	210
Buffer volume (ml)	225	300	500
Unit W×L×H (mm)	90×210×90	175×265×90	

Description	Pk	Cat. No.
Horizontal gel unit, shiroGEL Mini 10, 7×10 cm	1	700-0250
Horizontal gel unit, shiroGEL Midi Plus 10, 15×10 cm	1	700-0253
Horizontal gel unit, shiroGEL Midi Plus 15, 15×15 cm	1	700-0255

Description	Pk	Cat. No.
Combs for shiroGEL horizontal gel systems		
Comb, 5-well, 1,5 mm thickness for 7 cm gel tray	1	700-0263
Comb, 8-well, 1,0 mm thickness for 7 cm gel tray	1	700-0264
Comb, 10-well, 1,5 mm thickness for 7 cm gel tray	1	700-0258
Comb, 12-well, 1,0 mm thickness for 7 cm gel tray*	1	700-0259
Comb, 12-well, 1,5 mm thickness for 7 cm gel tray*	1	700-0260
Comb, 16-well, 1,0 mm thickness for 7 cm gel tray	1	700-0261
Comb, 16-well, 1,5 mm thickness for 7 cm gel tray	1	700-0262
Comb, 8-well, 1,0 mm thickness for 15 cm gel tray	1	700-0288
Comb, 8-well, 1,5 mm thickness for 15 cm gel tray	1	700-0289
Comb, 10-well, 1,0 mm thickness for 15 cm gel tray	1	700-0265
Comb, 10-well, 1,5 mm thickness for 15 cm gel tray	1	700-0266
Comb, 12-well, 1,0 mm thickness for 15 cm gel tray	1	700-0267
Comb, 12-well, 1,5 mm thickness for 15 cm gel tray	1	700-0268
Comb, 14-well, 1,0 mm thickness for 15 cm gel tray*	1	700-0269
Comb, 14-well, 1,5 mm thickness for 15 cm gel tray*	1	700-0270
Comb, 14-well, 2,0 mm thickness for 15 cm gel tray*	1	700-0271
Comb, 16-well, 1,0 mm thickness for 15 cm gel tray	1	700-0272
Comb, 16-well, 1,0 mm thickness for 15 cm gel tray*	1	700-0273
Comb, 16-well, 1,5 mm thickness for 15 cm gel tray*	1	700-0274
Comb, 16-well, 2,0 mm thickness for 15 cm gel tray*	1	700-0275
Comb, 18-well, 1,0 mm thickness for 15 cm gel tray*	1	700-0276

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Description	Pk	Cat. No.
Combs for shiroGEL horizontal gel systems		
Comb, 18-well, 1,5 mm thickness for 15 cm gel tray*	1	**700-0277**
Comb, 20-well, 0,75 mm thickness for 15 cm gel tray	1	**700-0278**
Comb, 20-well, 1,0 mm thickness for 15 cm gel tray	1	**700-0279**
Comb, 20-well, 1,5 mm thickness for 15 cm gel tray	1	**700-0280**
Comb, 20-well, 2,0 mm thickness for 15 cm gel tray	1	**700-0281**
Comb, 28-well, 0,75 mm thickness for 15 cm gel tray*	1	**700-0282**
Comb, 28-well, 1,0 mm thickness for 15 cm gel tray*	1	**700-0283**
Comb, 28-well, 1,5 mm thickness for 15 cm gel tray*	1	**700-0284**
Comb, 30-well, 1,0 mm thickness for 15 cm gel tray*	1	**700-0285**
Comb, 30-well, 1,5 mm thickness for 15 cm gel tray*	1	**700-0286**
Comb, 35-well, 1,5 mm thickness for 15 cm gel tray	1	**700-0287**
Accessories		
Casting dam for 7 cm gel tray	2	**700-0252**
Casting dam for 15 cm gel tray	2	**700-0257**
UV transparent gel tray for shiroGEL Mini 10	1	**700-0251**
UV transparent gel tray for shiroGEL Midi Plus 10	1	**700-0254**
UV transparent gel tray for shiroGEL Midi Plus 15	1	**700-0256**

*Multi channel pipette compatible

Horizontal electrophoresis apparatus, shiroGEL horizontal 96

The 96-well format horizontal gel electrophoresis unit is compatible with 8-channel multi channel pipettes and matches up with the standard 96-well plate configuration. The average run time is 15 to 30 minutes per gel. The layout of wells is designed to allow a run length of 18 mm per sample, providing ideal separation.

Model	shiroGEL horizontal 96 (1 mm, 1 marker)	shiroGEL horizontal 96 (1,5 mm, 1 marker)	shiroGEL horizontal 96 (1 mm, 2 markers)	shiroGEL horizontal 96 (1,5 mm, 2 markers)
Gel size W×L (mm)	100×120			
Sample capacity	96 samples plus 1 marker lane		96 samples plus 2 marker lanes	
Buffer volume (ml)	300			
Unit W×L×H (mm)	220×125×90			

Description	Pk	Cat. No.
shiroGEL horizontal 96 system, including comb block (12×8-sample, assembled, comb thickness 1,0 mm, 1 marker lane)	1	**730-0340**
shiroGEL horizontal 96 system, including comb block (12×8-sample, assembled, comb thickness 1,5 mm, 1 marker lane)	1	**730-0341**
shiroGEL horizontal 96 system, including comb block (12×8-sample, assembled, comb thickness 1,0 mm, 2 marker lanes)	1	**730-0342**
shiroGEL horizontal 96 system, including comb block (12×8-sample, assembled, comb thickness 1,5 mm, 2 marker lanes)	1	**730-0343**

Description	Pk	Cat. No.
Combs for shiroGEL horizontal 96		
Comb, 8-sample (multi channel pipette compatible), 1,0 mm thick, 1 marker lane	1	**730-0344**
Comb, 8-sample (multi channel pipette compatible), 1,5 mm thick, 1 marker lane	1	**730-0345**
Comb, 8-sample (multi channel pipette compatible), 1,0 mm thick, 2 marker lanes	1	**730-0346**
Comb, 8-sample (multi channel pipette compatible), 1,5 mm thick, 2 marker lanes	1	**730-0347**
Comb block (assembled, 12×8-sample, multi channel pipette compatible),1,0 mm thick, 1 marker lane	1	**730-0348**
Comb block (assembled, 12×8-sample, multi channel pipette compatible),1,5 mm thick, 1 marker lane	1	**730-0349**
Comb block (assembled, 12×8-sample, multi channel pipette compatible),1,0 mm thick, 2 marker lanes	1	**730-0350**
Comb block (assembled, 12×8-sample, multi channel pipette compatible),1,5 mm thick, 2 marker lanes	1	**730-0351**

Mini Gel II electrophoresis system

The Mini Gel II is a complete electrophoresis system, which includes all components necessary to cast and run horizontal gels - gel trays, combs, casting stand, gel tank and digital power supply.

- Migration tank and gel trays are moulded for leakproof performance and for a long service life, and the lid of the gel box is vented to dissipate heat during electrophoresis
- Power supply easily disconnects from the gel box so that the gel box can be cleaned
- Mode and arrow keys on the membrane key pad make programming easy, with all parameters shown on a large digital display
- Casting sets are designed for pouring gels without the use of tape or spacers and casting trays feature multiple slots for holding combs in place
- Electrodes are contained in cassettes to protect from damage

Delivery information: Supplied with gel tank, direct connection power supply, and standard gel casting set. Standard casting set includes 12.5×13 cm gel tray, 2 each 12.5×6 cm gel trays, 4 each 14/28 tooth combs (1 mm) and a casting stand. Optional Micro casting set includes 4 each 6×6 cm UV transparent gel trays, 2 each 5/8 tooth combs (1 mm) and a casting stand.

Sample capacity	112 samples (4 combs)
Capacity	1 large gel (12,5×13 cm), 2 small gels (12,5×6 cm) or 4 micro gels (6×6 cm)
Buffer tank volume (ml)	250
Max. power (W)	45
Input voltage (V)	Universal, AC 100 - 240 V, 50/60 Hz
Output current range/increments (mA)	10 - 400
Output voltage (V)	10 - 150
Memory	Last parameters saved in memory
Safety	Microsensor (Hall effect) in power supply, no output without safety lid in place, automatic crossover, no load and load change detection
Timer	Maximum 99 hours, 59 minutes or continuous, audible alert at end of run
Tank W×D×H (mm)	183×164×560
Unit W×L×H (mm)	245×170×620

Description	Pk	Cat. No.
VWR Mini Gell II complete electrophoresis system, UK plug	1	**700-0004**

Description	Pk	Cat. No.
Combs for Mini gel II electrophoresis system		
Gel comb, 14/28 teeth (1 mm), reversible, set of 2	2	**700-0009**
Gel comb, 5/8 teeth (1 mm), reversible, set of 2	2	**700-0010**
Accessories		
Large UV transparent gel trays, 12.5×13 cm, set of 2	2	**700-0006**
Small UV transparent gel trays, 12.5×6 cm, set of 2	2	**700-0007**
Micro UV transparent gel trays, 6×6 cm, set of 4	4	**700-0008**
Micro casting set	1	**700-0011**
Casting stand	1	**700-0012**
Standard casting set	1	**700-0013**

Horizontal Mini Gel electrophoresis systems

C.B.S. Scientific

Available with gel bed dimensions of either 55×85 mm or 75×100 mm, these compact gel systems are suitable for rapidly separating and identifying RNA and DNA fragments, PCR products and synthetic oligonucleotides, whilst using minimal quantities of reagents. The horizontal Mini Gel system is available with or without a flip-lid safety cover, which allows smooth opening of the gel box without disturbing samples or gel. The uniquely designed safety cover must be in the closed position before the power leads can be attached and voltage applied. The system is also available in five fluorescent colours. These colour-coded systems are recommended to differentiate exclusive use by a specific laboratory or for a specific purpose.

- Tapered baffle system allows gel casting directly into the unit or removable gel trays without having to seal with agarose plugs or tapes
- Gel beds are made of UV transparent acrylic, allowing gels to be scanned at 275 to 325 nm without removing them from the unit
- Platinum electrode is sealed into the side wall, shielding it from buffer as it descends to the bottom of the unit, and is only exposed along the base of the reservoir on both sides so helping to protect the platinum and provide a uniform field across the width of the gel
- Height adjustable combs are available separately in several thicknesses and formats to accommodate different applications

Minimum sample volume: 2 µl (16-well comb)

Delivery information: Each system includes UV transparent gel bed, tapered baffles, safety cover with attached power leads, platinum electrodes, and one 1 mm thick comb (8/10-well with MGU-102T, 10/14-well with MGU-202T).

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Description	Pk	Cat. No.
Mini Gel system, MGU-102T, 55×85 mm transparent	1	730-1685
Mini Gel system, MGU-102T, 55×85 mm, with flip-lid transparent	1	730-1687
Mini Gel system, MGU-102T, 55×85 mm blue	1	730-1686
Mini Gel system, MGU-102T, 55×85 mm green	1	730-1688
Mini Gel system, MGU-102T, 55×85 mm purple	1	730-1689
Mini Gel system, MGU-102T, 55×85 mm pink	1	730-1690
Mini Gel system, MGU-102T, 55×85 mm yellow	1	730-1691
Mini Gel system, MGU-202T, 75×100 mm transparent	1	730-1692
Mini Gel system, MGU-202T, 75×100 mm, with flip-lid transparent	1	730-1694
Mini Gel system, MGU-202T, 75×100 mm blue	1	730-1693
Mini Gel system, MGU-202T, 75×100 mm green	1	730-1695
Mini Gel system, MGU-202T, 75×100 mm purple	1	730-1696
Mini Gel system, MGU-202T, 75×100 mm pink	1	730-1697
Mini Gel system, MGU-202T, 75×100 mm yellow	1	730-1698

Description	Pk	Cat. No.
Combs for horizontal Mini Gel electrophoresis systems		
Comb, PC, double-sided, for gel format 55×85 mm, 1,0 mm, 8/10 sample	1	730-0846
Comb, PC, double-sided, for gel format 55×85 mm, 1,0 mm, 12/16 sample	1	730-0847
Comb, PC, double-sided, for gel format 55×85 mm, 1,5 mm, 8/10 sample	1	730-0848
Comb, PC, double-sided, for gel format 55×85 mm, 1,5 mm, 12/16 sample	1	730-0849
Comb, PC, double-sided, for gel format 55×85 mm, 2,0 mm, 8/10 sample	1	730-0850
Comb, PC, double-sided, for gel format 55×85 mm, 2,0 mm, 12/16 sample	1	730-0851
Comb, PC, double-sided, for gel format 75×100 mm, 1,0 mm, 8/16 sample	1	730-0858
Comb, PC, double-sided, for gel format 75×100 mm, 1,0 mm, 10/14 sample	1	730-0860
Comb, PC, double-sided, for gel format 75×100 mm, 1,5 mm, 8/16 sample	1	730-0862
Comb, PC, double-sided, for gel format 75×100 mm, 1,5 mm, 10/14 sample	1	730-0864
Comb, PC, double-sided, for gel format 75×100 mm, 2,0 mm, 8/16 sample	1	730-0866
Comb, PC, double-sided, for gel format 75×100 mm, 2,0 mm, 10/14 sample	1	730-0868

Horizontal Midi Gel electrophoresis systems, MGU series

C.B.S. Scientific

The Midi Gel range of horizontal gel systems offers a choice of three convenient sizes, midway between standard and mini-gel system sizes. The reduced path length of the resolving gel allows for rapid screening of samples.

- Choice of three gel bed dimensions: 105×110 mm, 140×110 mm, and 140×160 mm
- Tapered baffles for simplified gel casting
- Wide choice of polycarbonate combs available, including combs for multi channel pipette loading
- UV transparent gel trays configured to allow a single run or multiple, simultaneous runs and are 6 mm thick to prevent heat distortion during application of hot agarose
- Colour coded units can be used to differentiate exclusive use by a specific laboratory, or a specific use

Delivery information: Each system includes UV transparent gel tray, tapered baffles, safety cover with attached power leads, platinum electrodes, and one 1,0 mm, 12-well comb.

Description	Pk	Cat. No.
Midi Gel system, MGU-402T, 105×110 mm, with flip-lid, blue	1	730-1701
Midi Gel system, MGU-402T, 105×110 mm, green	1	730-1702
Midi Gel system, MGU-402T, 105×110 mm, blue	1	730-1700
Midi Gel system, MGU-402T, 105×110 mm, pink	1	730-1704
Midi Gel system, MGU-402T, 105×110 mm, purple	1	730-1703
Midi Gel system, MGU-402T, 105×110 mm, yellow	1	730-1705
Midi Gel system, MGU-502T, 140×110 mm, with flip-lid, blue	1	730-1707
Midi Gel system, MGU-502T, 140×110 mm, green	1	730-1708
Midi Gel system, MGU-502T, 140×110 mm, blue	1	730-1706
Midi Gel system, MGU-502T, 140×110 mm, pink	1	730-1710
Midi Gel system, MGU-502T, 140×110 mm, purple	1	730-1709
Midi Gel system, MGU-502T, 140×110 mm, yellow	1	730-1711
Midi Gel system, MGU-602T, 140×160 mm, with flip lid, blue	1	730-1713
Midi Gel system, MGU-602T, 140×160 mm, green	1	730-1714
Midi Gel system, MGU-602T, 140×160 mm, blue	1	730-1712
Midi Gel system, MGU-602T, 140×160 mm, pink	1	730-1716
Midi Gel system, MGU-602T, 140×160 mm, purple	1	730-1715
Midi Gel system, MGU-602T, 140×160 mm, yellow	1	730-1717

Description	Pk	Cat. No.
Combs		
Comb, PC, 105 mm wide unit, 1,0 mm, 5-sample	1	730-0841
Comb, PC, 105 mm wide unit, 1,0 mm, 12-sample	1	730-0842
Comb, PC, 105 mm wide unit, 1,0 mm, 18-sample	1	730-0843
Comb, PC, 105 mm wide unit, 1,5 mm, 12-sample	1	730-0844
Comb, PC, 105 mm wide unit, 1,5 mm, 18-sample	1	730-0845
Comb, PC, for 140 mm wide unit, 1,0 mm, 10-sample	1	730-0870
Comb, PC, for 140 mm wide unit, 1,0 mm, 20-sample	1	730-0872

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Description	Pk	Cat. No.
Combs		
Comb, PC, for 140 mm wide unit, 1,0 mm, 27-sample*	1	730-0874
Comb, PC, for 140 mm wide unit, 1,5 mm, 10-sample	1	730-0876
Comb, PC, for 140 mm wide unit, 1,5 mm, 20-sample	1	730-0878
Comb, PC, for 140 mm wide unit, 1,5 mm, 27-sample*	1	730-0880
Comb, PC, for 140 mm wide unit, 2,0 mm, 10-sample	1	730-0882
Comb, PC, for 140 mm wide unit, 2,0 mm, 20-sample	1	730-0988
Comb, PC, for 140 mm wide unit, 2,0 mm, 27-sample*	1	730-0989
Accessories		
Gel casting tray for MGU-402T single place	1	730-0087
Gel casting tray for MGU-402T dual place	1	730-0088
Gel casting tray for MGU-502T single place	1	730-0990
Gel casting tray for MGU-502T dual place	1	730-0991
Gel casting tray for MGU-602T single place	1	730-0992
Gel casting tray for MGU-602T dual place	1	730-0993

* Optimal for multi channel pipetting

Horizontal Maxi Gel electrophoresis systems

C.B.S. Scientific

These horizontal submarine systems are available with four different gel bed sizes. Applications include separation and identification of cloning products, restriction fragments, synthetic oligonucleotides and PCR products.

- Tapered baffles simplify submarine gel formation
- Gel tray configuration allows single run or multiple, simultaneous short runs
- Gel trays are made of UV transparent acrylic, are 6 mm thick to prevent heat distortion during application of hot agarose and are equipped with agarose 'anchors' to prevent the gel from floating during electrophoresis
- Buffer recirculation ports allow maintenance of uniform pH and ionic strength and reduce the frequency of buffer changes necessary during long runs
- Wide variety of polycarbonate combs are available in a range of thicknesses, including combs designed for multi channel pipette loading

Delivery information: Each unit includes cooling chamber, UV transparent gel tray, one comb, safety cover with attached power leads, and platinum electrodes. Please specify preferred comb at time of ordering.

Description	Pk	Cat. No.
Horizontal submarine gel system, 140×200 mm	1	730-1794
Horizontal submarine gel system, 200×200 mm	1	730-1795
Horizontal submarine gel system, 200×300 mm	1	730-1796
Horizontal submarine gel system, 200×400 mm	1	730-1797

Description	Pk	Cat. No.
Combs		
Comb, PC, for 140 mm wide unit, 1,0 mm, 20-sample	1	730-0872
Comb, PC, for 140 mm wide unit, 1,0 mm, 27-sample*	1	730-0874
Comb, PC, for 140 mm wide unit, 1,5 mm, 10-sample	1	730-0876
Comb, PC, for 140 mm wide unit, 1,5 mm, 20-sample	1	730-0878
Comb, PC, for 140 mm wide unit, 1,5 mm, 27-sample*	1	730-0880
Accessories and combs		
Comb, PC, for 200 mm wide units 1,0 mm, 20-sample*	1	730-0883
Comb, PC, for 200 mm wide units 1,0 mm, 30-sample	1	730-0885
Comb, PC, for 200 mm wide units 1,0 mm, 40-sample*	1	730-0886
Comb, PC, for 200 mm wide units 2,0 mm, 20-sample*	1	730-0890
Comb, PC, for 200 mm wide units 2,0 mm, 30-sample	1	730-0893
Comb, PC, for 200 mm wide units 2,0 mm, 40-sample*	1	730-0894
Accessories		
Gel scoop for 140×200 mm	1	730-0837
Gel scoop for 200×200 mm	1	730-0838
Gel scoop for 200×300 mm	1	730-0839
Gel scoop for 200×400 mm	1	730-0840
UV-transparent gel tray for 140×200 mm	1	730-1786
UV-transparent gel tray for 200×200 mm	1	730-1787
UV-transparent gel tray for 200×300 mm	1	730-1788
UV-transparent gel tray for 200×400 mm	1	730-1789

* Optimal for multi channel pipetting

Horizontal gel systems for high throughput screening (HTS)
C.B.S. Scientific

These HTS submarine systems are designed for the rapid screening of samples from microtitre plates. Applications include screening of cloning products, restriction fragments, synthetic oligonucleotides or PCR products. The three units have gel bed dimensions of 260 mm wide, with a choice of gel lengths of 140 mm, 260 mm and 400 mm.

- Microtitre format allows multi channel pipetting for accuracy and speed
- Tapered baffles simplify gel casting
- Gel tray configuration allows single run or multiple, simultaneous short runs
- Gel trays are made of UV transparent acrylic to enable direct reading of ethidium bromide stains, and are 6 mm thick to prevent heat distortion during application of hot agarose
- Buffer recirculation ports allow maintenance of uniform pH and ionic strength and reduce the frequency of buffer changes necessary during long runs
- Wide range of height adjustable, polycarbonate combs are available in a range of thicknesses and all with microtitre spacing

Delivery information: Each unit includes base unit, safety cover with attached power leads, UV transparent gel tray and four combs (2×2.0 mm, 26-sample; 2×2.0 mm, 51-sample).

Description	Pk	Cat. No.
HTS submarine system, 260×140 mm	1	**730-1798**
HTS submarine system, 260×260 mm	1	**730-1799**
HTS submarine system, 260×400 mm	1	**730-1800**

Description	Pk	Cat. No.
Combs for horizontal gel systems for high throughput screening (HTS)		
Comb, PC, height adjustable 1,0 mm, 102-sample	1	**730-0896**
Comb, PC, height adjustable 1,0 mm, 26-sample	1	**730-0897**
Comb, PC, height adjustable 1,0 mm, 51-sample	1	**730-0898**
Comb, PC, height adjustable 2,0 mm, 102-sample	1	**730-0899**
Comb, PC, height adjustable 2,0 mm, 26-sample	1	**730-0900**
Comb, PC, height adjustable 2,0 mm, 51-sample	1	**730-0901**
Comb, PC, height adjustable 0,75 mm, 26-sample	1	**730-0902**
Accessories		
UV transparent gel tray for 260×140 mm system	1	**730-1791**
UV transparent gel tray for 260×260 mm system	1	**730-1792**
UV transparent gel tray for 260×400 mm system	1	**730-1793**

First-dimension isoelectric focussing unit, IEF100
Hoefer

The IEF100 allows the monitoring of current flow for individual IPG strips in real time. Feedback controls allow the system to be run at maximum voltage without damage to the IPG strips, allowing faster separation of samples.

- Flexible first-dimension IEF can be run with up to six 7 to 24 cm IPG strips simultaneously, or twelve 7 cm IPG strips using the included dual electrode accessory
- Choice of cup-loading or rehydration tray-loading to accommodate individual sample requirements
- Turn and click intuitive user interface with graphical display
- Capable of faster run times with an integrated 12 000 V power supply and Peltier cooling (15 - 25 °C)
- Easily accessible Ethernet and RS232 ports

Delivery information: Each system is supplied with a bag of 252 wicks, running tray, small and large rehydration trays, cleaning brush, forceps and ten sets of running cups (6 cups/set).

Model	IEF100
Sample capacity	240 µl/cup
Input voltage (V)	12000 V
Current (mA)	10 mA (999 µA/strip)
Tank W×D×H (mm)	380×270×190
Weight (kg)	6

Description	Pk	Cat. No.
Isoelectric focussing unit, IEF100	1	**732-2158**

Description	Pk	Cat. No.
Accessories and spare parts		
Running tray	1	**732-2157**
Wicks, 2 bags, 252 wicks per bag	504	**732-2156**
Sample cups, 10 sets, 6 cups/set	60	**732-2155**
Rehydration tray, small	1	**732-2154**

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Description	Pk	Cat. No.
Accessories and spare parts		
Rehydration tray, large	1	**732-2153**
Rehydration tray, medium	1	**732-2152**
Forceps	1	**732-2151**

Amersham ECL™ gel system
GE Healthcare

Horizontal mini gel electrophoresis system for high quality protein electrophoresis. Designed to make protein PAGE as simple as agarose gel DNA electrophoresis.

- High lot-to-lot consistency of gels ensures reproducible, high-quality results
- Easier sample application and reduced buffer consumption than conventional vertical systems, plus no risk of leakage
- Economic - same ready-to-run gels used for native and denaturing conditions, together with long shelf life, minimise risk of scrapping
- Robust gels for convenient handling in downstream detection steps
- Everything required to access and cut the gel is included in the Amersham ECL™ Gel cassette

Delivery information: Complete system includes gel box, precast gels, and premixed running buffer for polyacrylamide gel electrophoresis (PAGE). Each component must be ordered separately.

Description	Pk	Cat. No.
Amersham ECL™ Gel Box	1	**28-9906-08**

Description	Pk	Cat. No.
Accessories		
Amersham ECL™ gel running buffer (10X), 2×125 ml	2	**28-9902-52**
Precast gels for Amersham ECL™ gel system		
Amersham ECL™ Gel 10%, 2 wells	10	**28-9901-60**
Amersham ECL™ Gel 12%, 2 wells	10	**28-9901-61**
Amersham ECL™ Gel 4-12%, 2 wells	10	**28-9901-62**
Amersham ECL™ Gel 8-16%, 2 wells	10	**28-9901-63**
Amersham ECL™ Gel 4-20%, 2 wells	10	**28-9901-64**
Amersham ECL™ Gel 10%, 10 wells	2	**28-9898-08**
Amersham ECL™ Gel 10%, 10 wells	10	**28-9898-04**
Amersham ECL™ Gel 12%, 10 wells	2	**28-9898-09**
Amersham ECL™ Gel 12%, 10 wells	10	**28-9898-05**
Amersham ECL™ Gel 4-12%, 10 wells	2	**28-9901-51**
Amersham ECL™ Gel 4-12%, 10 wells	10	**28-9898-06**
Amersham ECL™ Gel 8-16%, 10 wells	2	**28-9901-52**
Amersham ECL™ Gel 8-16%, 10 wells	10	**28-9898-07**
Amersham ECL™ Gel 4-20%, 10 wells	2	**28-9901-53**
Amersham ECL™ Gel 4-20%, 10 wells	10	**28-9901-54**
Amersham ECL™ Gel 10%, 15 wells	10	**28-9901-55**
Amersham ECL™ Gel 12%, 15 wells	10	**28-9901-56**
Amersham ECL™ Gel 4-12%, 15 wells	10	**28-9901-57**
Amersham ECL™ Gel 8-16%, 15 wells	10	**28-9901-58**
Amersham ECL™ Gel 4-20%, 15 wells	10	**28-9901-59**

Dual-gel vertical electrophoresis systems, kuroGEL Verti 1010

The kuroGEL Verti vertical dual-gel units offer the flexibility of running dual gels either cooled or uncooled and with or without a casting base.

The kuroGEL Verti 1010 mini gel units are ideal for standard PAGE applications requiring self-cast gels. Soft silicone gaskets in the precision engineered casting base act in tandem with the gel running module to provide simple, leak-free casting and assembly.

- Novel clamping arrangement allows most commercially available 8×10 cm or 10×10 cm precast polyacrylamide gels in a wide range of cassette thicknesses to be run
- Two screws make clamping simple without using separate clamps
- Self-sealing snap-on connectors prevent the spills which commonly occur when disconnecting the cooling liquid

Delivery information: Complete system supplied with 2 plain glass plates; 2 notched glass plates; 1 dummy plate; 2×1,0 mm spacer sets; 2×1,0 mm combs, 12-sample wells.

Model	kuroGEL Verti 1010	kuroGEL Verti 1010Y	kuroGEL Verti 1010K	kuroGEL Verti 1010YK
Buffer volume, gel tank (ml)	1200		1600	
Buffer volume, inner chamber (ml)	90			
Gel size W×H (mm)	80×85			
Power output shrouded, connectors (Ø mm)	4			
Recommended running voltage (V)	50 - 100		100 - 150	
Sample capacity	2×20			
Unit W×H×D (mm)	200×140×150		280×180×150	

Description	Pk	Cat. No.
kuroGEL Verti 1010, uncooled, for two 10×10 cm gels	1	**700-0166**
kuroGEL Verti 1010Y, uncooled, for two 10×10 cm gels, with casting base	1	**700-0167**
kuroGEL Verti 1010K, cooled, for two 10×10 cm gels	1	**700-0168**
kuroGEL Verti 1010YK, cooled, for two 10×10 cm gels, with casting base	1	**700-0169**

Description	Pk	Cat. No.
Combs for dual-gel vertical electrophoresis units, kuroGEL 1010		
Comb, 0,75 mm, 10-sample	1	**700-7036**
Comb, 0,75 mm, 12-sample	1	**700-7037**
Comb, 1,0 mm, 10-sample	1	**700-7038**
Comb, 1,0 mm, 12-sample	1	**700-7039**
Comb, 1,0 mm, 16-sample	1	**730-1329**
Comb, 1,5 mm, 10-sample	1	**700-7040**
Comb, 1,5 mm, 12-sample	1	**700-7041**
Comb, 1,5 mm, 16-sample	1	**730-1328**
Comb, 2,0 mm, 10-sample	1	**700-7042**
Comb, 2,0 mm, 12-sample	1	**700-7043**
Accessories		
Casting base for kuroGEL Verti 1010	1	**700-0170**
Silicone seals for 2-gel cam casting system, pack of 2	2	**700-7050**
Dummy plate	1	**700-7055**
Spacer set, 0.75 mm	2	**700-7059**
Spacer set, 1.0 mm	2	**700-7060**
Spacer set, 1.5 mm	2	**700-7061**
Spacer set, 2.0 mm	2	**700-7062**
Plain glass plates, pack of 2	2	**700-7058**
Plain glass plates with bonded 0.75 mm spacers, pack of 2	2	**700-7286**
Plain glass plates with bonded 1.0 mm spacers, pack of 2	2	**700-7287**
Plain glass plates with bonded 1.5 mm spacers, pack of 2	2	**700-7288**
Plain glass plates with bonded 2.0 mm spacers, pack of 2	2	**700-7289**

Dual-gel vertical electrophoresis systems, kuroGEL Verti 2020

The kuroGEL Verti vertical dual-gel units offer the flexibility of running dual gels either cooled or un-cooled and with or without a casting base.

The kuroGEL Verti 2020 twin-plate units offer all the benefits of the kuroGEL Verti 1010, but with a much larger gel size and with increased sample throughput. A cooling coil in the kuroGEL Verti 2020K gel tanks allows faster separations to be performed at high voltage without compromising resolution.

- Large format gels for increased sample throughput and longer separation
- High resolution maintained with excellent cooling capabilities
- Self-sealing connectors prevent spills which commonly occur when disconnecting the cooling liquid

Delivery information: Complete system supplied with 2 plain glass plates; 2 notched glass plates; 1 dummy plate; 2×1,0 mm spacer sets; 2×1,0 mm combs, 24-sample wells.

Model	kuroGEL Verti 2020	kuroGEL Verti 2020Y	kuroGEL Verti 2020K	kuroGEL Verti 2020YK
Buffer volume, gel tank (ml)	4200			
Buffer volume, inner chamber (ml)	700			
Gel size W×H (mm)	165×175			
Power output shrouded, connectors (Ø mm)	4			
Recommended running voltage (V)	175 - 225		200 - 300	
Sample capacity	2×48			
Unit W×H×D (mm)	285×275×150		380×275×150	

Description	Pk	Cat. No.
kuroGEL Verti 2020, uncooled, for two 20×20 cm gels	1	**700-0171**
kuroGEL Verti 2020Y, uncooled, for two 20×20 cm gels, with casting base	1	**700-0172**
kuroGEL Verti 2020K, cooled, for two 20×20 cm gels	1	**700-0173**
kuroGEL Verti 2020YK, cooled, for two 20×20 cm gels, with casting base	1	**700-0174**

Description	Pk	Cat. No.
Combs for dual-gel vertical electrophoresis units, kuroGEL 2020		
Comb, 0,75 mm, 24-sample	1	**700-7065**
Comb, 0,75 mm, 36-sample	1	**700-7066**
Comb, 0,75 mm, 48-sample	1	**700-7067**
Comb, 1,0 mm, 24-sample	1	**700-7069**
Comb, 1,0 mm, 36-sample	1	**700-7070**
Comb, 1,0 mm, 48-sample	1	**700-7071**
Comb, 1,5 mm, 24-sample	1	**700-7073**
Comb, 1,5 mm, 36-sample	1	**700-7074**
Comb, 1,5 mm, 48-sample	1	**700-7075**
Comb, 2,0 mm, 36-sample	1	**700-7078**
Comb, 2,0 mm, 48-sample	1	**700-7079**
Accessories		
Casting base for kuroGEL Verti 2020 and 2020Y-DGGE	1	**700-0176**
Dummy plate	1	**700-7145**
Plain glass plates, pack of 2	2	**700-7151**
Spacer set, 1.0 mm	2	**700-7152**
Spacer set, 1.5 mm	2	**700-7153**
Spacer set, 2.0 mm	2	**700-7154**
Spacer set, 0.75 mm	2	**700-7248**
Plain glass plates with bonded 0.75 mm spacers, pack of 2	2	**700-7290**
Plain glass plates with bonded 1.0 mm spacers, pack of 2	2	**700-7291**
Plain glass plates with bonded 1.5 mm spacers, pack of 2	2	**700-7292**
Gel running module for kuroGEL Verti 2020 and 2020Y-DGGE	1	**730-7001**

Dual-cooled vertical electrophoresis systems, kuroGEL Verti 1816K and 1824K

The kuroGEL Verti dual-cooled units are available in standard (18×16 cm) or tall (18×24 cm) formats.

- Produce straight lanes and sharp, well defined bands
- Run up to four gels (maximum 112 samples) at one time under identical conditions
- Run gels at uniform temperature from 1 to 45 °C
- Accommodates denaturing and native polyacrylamide gels and 2-D electrophoresis
- A wide array of accessories allow gel configurations to be tailored to meet individual needs

Delivery information: Complete system includes lower and upper buffer chambers; safety lid with high voltage leads; heat exchanger; glass plates 18×16 cm for Verti 1816K or 18×24 cm for Verti 1824K (6 pcs); clamp assemblies, 16 cm (4 pcs) for Verti 1816K or 8 cm (4 pcs) and 16 cm (4 pcs) for Verti 1824K; cams (6 pcs); slotted gaskets for upper buffer chamber (2 pcs); dual gel casting stand with levelling base; bubble level; laminated gaskets for caster (2 pcs); buffer dam; alignment template; plate separation tool; gel seal; combs, 15 well, 1,5 mm thick (2 pcs); spacers, 1,5 mm thick, 2 cm wide (4 pcs).

Model	1816K	1824K
Glass plate size (W×H) (mm)	180×160 / 180×80	180×240 / 180×160 / 180×80
Humidity (% RH)	≤80	
Max power requirement	1000 V, 500 mA, 50 W	
Max. temperature (°C)	45	
Spacers (mm)	0,75, 1,0, 1,5	
Unit W×H×D (mm)	320×290×140	320×370×140

Description	Pk	Cat. No.
kuroGEL Verti 1816K dual-cooled units (glass plate sizes 18×16 cm or 18×8 cm)		
Dual-cooled vertical gel unit, kuroGEL 1816K	1	**700-0189**
kuroGEL Verti 1824K dual-cooled units (maximum glass plate size 18×24 cm)		
Dual-cooled vertical gel unit, kuroGEL 1824K	1	**700-0177**

Description	For	Pk	Cat. No.
Combs for kuroGEL Verti 1816K and 1824K			
Comb, 10-well, 0,75 mm thickness, well volume 6,2 µl per 1 mm depth		1	**700-0200**
Comb, 10-well, 1,0 mm thickness, well volume 8,3 µl per 1 mm depth		1	**700-0201**
Comb, 10-well, 1,5 mm thickness, well volume 12,4 µl per 1 mm depth		1	**700-0202**
Comb, 12-well, 0,75 mm thickness, well volume 5,8 µl per 1 mm depth		1	**700-0203**
Comb, 12-well, 1,0 mm thickness, well volume 7,7 µl per 1 mm depth		1	**700-0204**
Comb, 12-well, 1,5 mm thickness, 7,6 mm well width, well volume 11,5 µl per 1 mm depth		1	**700-0205**
Comb, 15-well, 0,75 mm thickness, well volume 4,3 µl per 1 mm depth		1	**700-0206**
Comb, 15-well, 1,0 mm thickness, well volume 5,7 µl per 1 mm depth		1	**700-0207**
Comb, 15-well, 1,5 mm thickness, well volume 8,6 µl per 1 mm depth		1	**700-0208**
Comb, 20-well, 0,75 mm thickness, well volume 3,1 µl per 1 mm depth		1	**700-0209**
Comb, 20-well, 1,0 mm thickness, well volume 4,1 µl per 1 mm depth		1	**700-0210**
Comb, 20-well, 1,5 mm thickness, well volume 6,2 µl per 1 mm depth		1	**700-0211**
Comb, 28-well, 0,75 mm thickness, well volume 2,1 µl per 1 mm depth		1	**700-0212**
Comb, 28-well, 1,0 mm thickness, well volume 2,7 µl per 1 mm depth		1	**700-0213**
Comb, 28-well, 1,5 mm thickness, well volume 4,1 µl per 1 mm depth		1	**700-0214**
Adjustable comb back, converts 25 mm deep comb to 10 or 15 mm depth		1	**700-0215**
Prep comb 1/1 well, 0,75 mm thickness		1	**700-0216**
Prep comb 1/1 well, 1,0 mm thickness		1	**700-0217**
Prep comb 1/1 well, 1,5 mm thickness		1	**700-0218**
Prep comb 1/2 well, 0,75 mm thickness		1	**700-0219**
Prep comb 1/2 well, 1,0 mm thickness		1	**700-0220**
Prep comb 1/2 well, 1,5 mm thickness		1	**700-0221**
Accessories			
Lid with high voltage leads	Verti 1816K and Verti 1824K	1	**700-0178**
High voltage leads	Verti 1816K and Verti 1824K	1 SET	**700-0179**
Cams, 4 pieces	Verti 1816K and Verti 1824K	4	**700-0180**
Lower buffer chamber	Verti 1824K	1	**700-0188**
Lower buffer chamber	Verti 1816K	1	**700-0190**
Upper buffer chamber	Verti 1816K and Verti 1824K	1	**700-0181**
Buffer dam	Verti 1816K and Verti 1824K	1	**700-0183**
Slotted gaskets, 2 pieces, for upper buffer chamber	Verti 1816K and Verti 1824K	2	**700-0182**
Clamp assembly, 8 cm, 2 pieces	Verti 1816K and Verti 1824K	2	**700-0184**
Clamp assembly, 16 cm, 2 pieces	Verti 1816K and Verti 1824K	2	**700-0185**
Clamp and cam kit, iincluding clamp assembly 16 cm, (4 pieces) and cams (8 pieces)	Verti 1816K and Verti 1824K	1 KIT	**700-0186**
Heat exchanger	Verti 1816K and Verti 1824K	1	**700-0187**
Glass plates, regular, 18x8 cm (2 pieces)	Verti 1816K and Verti 1824K	2	**700-0191**
Glass plates, low fluorescence, 18x8 cm (2 pieces)	Verti 1816K and Verti 1824K	2	**700-0192**
Notched glass divider plate, 18x8 cm	Verti 1816K and Verti 1824K	2	**700-0193**
Glass plates, regular, 18x16 cm (2 pieces)	Verti 1816K and Verti 1824K	2	**700-0194**
Glass plates, low fluorescence, 18x16 cm (2 pieces)	Verti 1816K and Verti 1824K	2	**700-0195**

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Description	For	Pk	Cat. No.
Accessories			
Notched glass divider plate, 18x16 cm	Verti 1816K and Verti 1824K	1	**700-0196**
Glass plates, regular, 18x24 cm (2 pieces)	Verti 1824K	2	**700-0197**
Glass plates, low fluorescence, 18x24 cm (2 pieces)	Verti 1824K	2	**700-0198**
Notched glass divider plate, 18x24 cm	Verti 1824K	2	**700-0199**
Spacers, 0.75 mm thickness, 8 cm length, 2 cm width	Verti 1816K and Verti 1824K	2	**700-0222**
Spacers, 1.0 mm thickness, 8 cm length, 2 cm width	Verti 1816K and Verti 1824K	2	**700-0223**
Spacers, 1.5 mm thickness, 8 cm length, 2 cm width	Verti 1816K and Verti 1824K	2	**700-0224**
Spacers, 0.75 mm thickness, 16 cm length, 2 cm width	Verti 1816K and Verti 1824K	2	**700-0225**
Spacers, 1.0 mm thickness, 16 cm length, 2 cm width	Verti 1816K and Verti 1824K	2	**700-0226**
Spacers, 1.5 mm thickness, 16 cm length, 2 cm width	Verti 1816K and Verti 1824K	2	**700-0227**
Spacers, 0.75 mm thickness, 24 cm length, 2 cm width	Verti 1824K	2	**700-0228**
Spacers, 1.0 mm thickness, 24 cm length, 2 cm width	Verti 1824K	2	**700-0229**
Spacers, 1.5 mm thickness, 24 cm length, 2 cm width	Verti 1824K	2	**700-0230**
Spacers, 1.0 mm thickness, 16 cm length, 1 cm width	Verti 1816K and Verti 1824K	2	**700-0231**
Spacers, 1.5 mm thickness, 16 cm length, 1 cm width	Verti 1816K and Verti 1824K	2	**700-0232**

VWR COLLECTION

SELECTED FOR YOU

Modular mini vertical PAGE systems, shiroGEL

The shiroGEL mini vertical PAGE system is modular, allowing PAGE and electroblotting to be carried out in the same tank, simply by changing the inserts. The system features inserts for each application and a common buffer tank in which to run them. Each insert has its own electrode assembly, which connects to the lid of the buffer tank. For safety, the power leads connect directly to the lid. When the lid is removed, power is disconnected from the system. The inserts also have a small pad that fits into position in the lid. This ensures that the lid is always properly placed and aids in its removal. The buffer tank is moulded to prevent separation and leaking. A variety of spacers, combs and other accessories are available to customise the system. All spacers and combs are colour coded or clearly labelled to indicate thickness.

- Runs up to four gels simultaneously
- Gels can be cast and run using the PAGE module
- Sturdy, moulded buffer chamber with lid that fits only one way

Delivery information: Complete system includes buffer tank; PAGE module; casting base; two 10×10 cm notched glass plates; two 10×10 cm glass plates with bonded spacers; and two 12-tooth, 1 mm thick combs.

Buffer volume, gel tank (ml)	250
Gel size W×H (mm)	100×100
Sample capacity	20 samples per gel, 2 gels per run
Unit W×H×D (mm)	190×130×150**

Description	Pk	Cat. No.
Mini PAGE complete system, shiroGEL	1	**700-0292**

Description	Pk	Cat. No.
Combs for mini vertical PAGE system, shiroGEL		
Comb, 5-well, 0,75 mm thickness	1	**700-0311**
Comb, 5-well, 1,0 mm thickness	1	**700-0312**
Comb, 5-well, 1,5 mm thickness	1	**700-0313**
Comb, 8-well, 1,0 mm thickness*	1	**700-0314**
Comb, 10-well, 0,75 mm thickness	1	**700-0298**
Comb, 10-well, 1,0 mm thickness	1	**700-0299**
Comb, 10-well, 1,5 mm thickness	1	**700-0300**
Comb, 12-well, 0,75 mm thickness	1	**700-0301**
Comb, 12-well, 1,0 mm thickness	1	**700-0302**
Comb, 12-well, 1,5 mm thickness	1	**700-0303**
Comb, 12-well, 2,0 mm thickness	1	**700-0304**
Comb, 16-well, 1,0 mm thickness*	1	**700-0305**
Comb, 20-well, 0,75 mm thickness	1	**700-0307**
Comb, 20-well, 1,0 mm thickness	1	**700-0308**
Comb, 20-well, 1,5 mm thickness	1	**700-0309**
Accessories		
Casting stand for PAGE insert	1	**700-0294**
PAGE insert only (no accessories)	1	**700-0295**
Spacers, 0.75 mm thick, pack of 2	2	**700-0296**
Spacers, 1.0 mm thick, pack of 2	2	**700-0306**
Spacers, 1.5 mm thick, pack of 2	2	**700-0297**
Spacers, 2.0 mm thick, pack of 2	2	**700-0310**
Dummy plate, 10x10 cm	1	**700-0318**
Notched glass plates with 0.75 mm spacers, pack of 2	1	**700-0319**
Notched glass plates with 1.5 mm spacers, pack of 2	1	**700-0320**
Notched glass plates, 2 mm thick, pack of 2	2	**700-0322**
Notched glass plates with 2 mm spacers, pack of 2	1	**700-0323**
Plain glass plates with 0.75 mm spacers, pack of 2	1	**700-0324**

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Description	Pk	Cat. No.
Accessories		
Plain glass plates with 1.0 mm spacers, pack of 2	1	**700-0326**
Plain glass plates with 1.5 mm spacers, pack of 2	1	**700-0325**
Plain glass plates, 2 mm thick, pack of 2	2	**700-0327**
Plain glass plates with 2.0 mm spacers, pack of 2	1	**700-0328**

*Multi channel pipette compatible; **buffer tank

Vertical electrophoresis systems, shiroGEL vertical 20

The shiroGEL vertical 20 offers application flexibility and is distinguised by its ease of gel casting and set-up, requiring only four screws to secure up to four 20×20 cm gels. This vertical screw clamp technology distributes pressure evenly along the height of gel rather than in the centre to eliminate plate bowing and gel compression, while maintaining a leakproof seal during casting. A built-in inner buffer chamber within the PAGE insert allows set up to be completed without inclusion of an upper buffer chamber. These systems are ideal for 1D and 2D SDS-PAGE, native, preparative, gradient and high resolution nucleic acid electrophoresis.

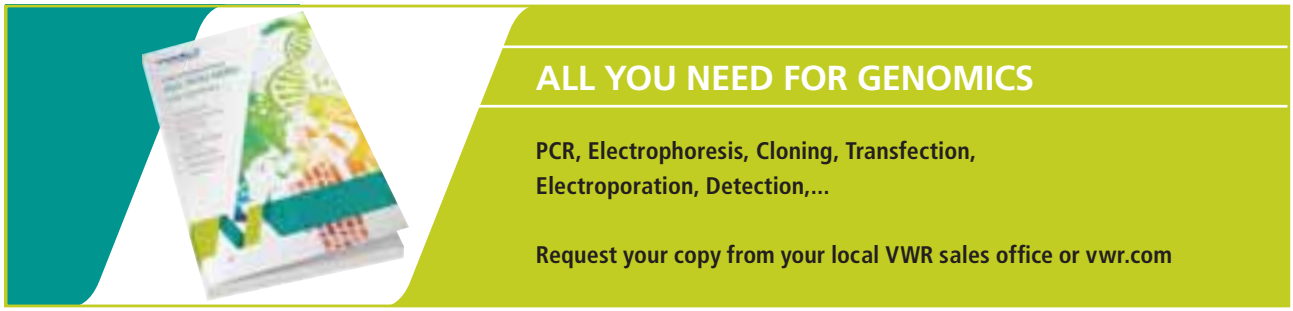
- Large format vertical gel system
- Electroblotting and gel electrophoresis possible in same universal gel tank
- Quick assembly system for ease of use
- Complete system allows casting of gels and running of gels at same time increasing efficiency
- Dual purpose PAGE insert eliminates time-consuming transfer of glass plates between separate casting and gel running components
- Glass plates with bonded spacers assure clean well formation, correct alignment for leak-free casting and eliminates need for manually aligning spacers
- Casting stand design ensures leak-free casting even if glass plates are misaligned

Delivery information: Each shiroGEL vertical 20 system includes glass plates, 2×24 sample (1 mm thick) combs, cooling coil and casting base. The shiroGEL vertical 20 dual casting system also includes an external casting stand (without electrodes). Electroblotting insert available separately.

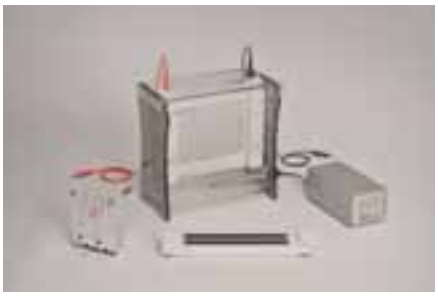
Gel size W×H (mm)	200×200

Description	Pk	Cat. No.
shiroGEL vertical 20 system	1	**700-0353**
shiroGEL vertical 20 dual casting system	1	**700-0354**

Description	Pk	Cat. No.
Accessories		
Notched glass plates, 200×200 mm, 2,0 mm thick	2	**700-0361**
Notched glass plates, 200×200 mm, 1,0 mm bonded spacers	2	**700-0368**
Notched glass plates, 200×200 mm, 0,75 mm bonded spacers	2	**700-0367**
Plain glass plates, 200×200 mm, 2,0 mm thick	2	**700-0362**
Plain glass plates, 200×200 mm, 2,0 mm bonded spacers	2	**700-0366**
Plain glass plates, 200×200 mm, 1,5 mm bonded spacers	2	**700-0365**
Plain glass plates, 200×200 mm, 1,0 mm bonded spacers	2	**700-0364**
Plain glass plates, 200×200 mm, 0,75 mm bonded spacers	2	**700-0363**
External casting stand (no electrodes)	1	**700-0355**
Casting base	1	**700-0356**
Replacement mats	1	**700-0359**
Cooling coil	1	**700-0358**
PAGE insert	1	**700-0357**
Dummy plate, 200×200 mm	1	**700-0369**



Denaturing gradient gel electrophoresis system, kuroGEL 2020Y-DGGE



The kuroGEL 2020Y denaturing gradient gel electrophoresis (DGGE) system is intended for use by researchers studying mutations and DNA polymorphisms critical in disease aetiology and genetic diversity. Based on the kuroGEL 2020 system, the DGGE version is designed primarily for parallel DGGE, where electrophoresis and the denaturing gradient run in the same direction. The kuroGEL 2020Y-DGGE has a maximum 96-sample throughput.

- 96-sample throughput, using two 48-sample combs, allows samples to be transferred quickly and easily from standard microtitre plates or thermal cycler blocks
- Large format, 20,5×20 cm, glass plates enable gradient gels to be poured containing wider ranges of denaturant concentration, maximising sensitivity and resolution
- 100 ml gradient mixer is included for use with the gel running module and casting base to make two 1 mm parallel denaturing gradient gels
- 400 W heater, manually controlled by a temperature control unit connected to a PT100 heat sensor, enables the gel temperature to be set in 1 °C increments to a predetermined melting temperature (Tm) of the PCR amplified DNA polymorphism or mutation of interest (to a maximum of 70 °C)

Gel W×H: 165×175 mm
Unit W×D×H: 285×150×290 mm
Sample capacity: 2×48
Buffer volume, inner chamber: 700 ml
Buffer volume, outer chamber: 4200 ml

Delivery information: Each system includes twin-plate maxi-gel unit with gel running module; heated gel tank with PT100 temperature sensor and thermometer; lid; two 20.5×20 cm plain glass plates, two 20.5×20 cm notched glass plates, four 1 mm spacers, two spacer aligners and two 1.0 mm thick 24-sample combs; casting base; 2 silicone seals; 1 dummy plate; plus GM 100 gradient mixer and heat sensor control unit.

Description	Pk	Cat. No.
Complete system, kuroGEL Verti 2020Y-DGGE	1	**700-0175**

Description	Pk	Cat. No.
Combs for dual-gel vertical electrophoresis units, kuroGEL 2020		
Comb, 1,0 mm, 24-sample	1	**700-7069**
Comb, 1,0 mm, 48-sample	1	**700-7071**
Accessories		
Casting base for kuroGEL Verti 2020 and 2020Y-DGGE	1	**700-0176**
Dummy plate	1	**700-7145**
Spacer set, 1.0 mm	2	**700-7152**
Gel running module for kuroGEL Verti 2020 and 2020Y-DGGE	1	**730-7001**

Other combs and accessories are available. Please see entry for kuroGEL 2020 or contact your local VWR office for details.

Gradient makers

Available in different sizes for different applications, these gradient makers are ideal for pouring polyacrylamide gradient gels and centrifugation gradients using sucrose or caesium chloride solutions. Each gradient mixer is precision engineered from high quality acrylic plastic and comprises leak-free valves that control mixing between the reservoir and mixing chambers and the resultant output flow.

Model	GM15	GM50	GM100	GM500
Application	15 ml total volume for sucrose and caesium chloride gradients	50 ml total volume sufficient to pour up to five 1 mm thick 10×10 cm, or one 1 mm thick 20×20 cm gradient gels	100 ml total volume for pouring ten 1 mm thick 10×10 cm, or two 1 mm thick 20×20 cm gradient gels	500 ml total volume suitable for up to ten 1 mm thick 20×20 cm gradient gels

Description	Pk	Cat. No.
Gradient maker, GM15	1	**700-7103**
Gradient maker, GM50	1	**700-7105**
Gradient maker, GM100	1	**700-7102**
Gradient maker, GM500	1	**700-7106**

Mini vertical electrophoresis unit, SE250 Mighty Small II

Hoefer

The SE250 Mightly Small II mini vertical electrophoresis unit is designed for quick screening and rapid separation.

- Maximum glass plate size 10×8 cm
- Efficient active cooling ensures sharp bands
- Quick and easy to assemble
- Requires minimal buffer
- Easily upgradable to the SE260 (with optional accessories) resulting in the additional capability of accommodating both 10×8 and 10×10,5 cm gels, enabling a wider variety of precast gel options

Delivery information: Complete system includes lower buffer chamber, upper buffer chamber/cooling core, safety lid with high voltage leads, casting cradle with sealing gasket set, 2× casting clamp assemblies, 4× cams, 10× rectangular glass plates (10×8 cm), 2× alumina plates, notched (10×8 cm), 4× spring clamps, 2× combs (10-well, 0,75 mm thickness), 4× T-spacers (0,75 mm thickness), 2× well locating decals, and gel seal. Basic unit includes same as above without the combs, spacers and caster, which can be ordered separately.

Model	SE250B	SE250-10A-.75
Glass plate size (W×H) (mm)	100×80	
Humidity (% RH)	<80%	
Max power requirement	500 V, 500 mA, 12 W	
Max. temperature (°C)	45	
Unit W×H×D (mm)	165×160×160	

Model	Description	Pk	Cat. No.
SE250B	Mighty Small II mini vertical electrophoresis unit, basic	1	**732-1751**
SE250-10A-.75	Mighty Small II mini vertical electrophoresis system, complete, with 0,75 mm combs and spacers	1	**732-1752**

Description	Pk	Cat. No.
Standard combs		
Standard comb, 5-well, 13,0×0,75 mm	1	**732-1728**
Standard comb, 5-well, 13,0×1,0 mm	1	**732-1732**
Standard comb, 5-well, 13,0×1,5 mm	1	**732-1734**
Standard comb, 9-well, 5,8×1,0 mm	1	**732-1737**
Standard comb, 10-well, 4,8×0,75 mm	1	**732-1705**
Standard comb, 10-well, 4,8×1,0 mm	1	**732-1707**
Standard comb, 10-well, 4,8×1,5 mm	1	**732-1710**
Standard comb, 12-well, 4,75×1,0 mm	1	**732-1714**
Standard comb, 15-well, 2,9×0,75 mm	1	**732-1716**
Standard comb, 15-well, 2,9×1,0 mm	1	**732-1719**
Standard comb, 15-well, 2,9×1,5 mm	1	**732-1723**
Standard comb, 18-well, 2,9×1,0 mm	1	**732-1727**
Preparative combs		
Preparative comb, 2-well (1× prep-large and 1× reference-small), 0,75 mm	1	**732-1740**
Preparative comb, 2-well (1× prep-large and 1× reference-small), 1,0 mm	1	**732-1745**
Preparative comb, 2-well (1× prep-large and 1× reference-small), 1,5 mm	1	**732-1748**
Accessories and spare parts		
Dual gel caster for plates 10×8 cm and 10×10,5 cm	1	**732-2382**
Spirit level	1	**732-1952**
T-spacers, 80×0,75 mm	2	**732-1698**
T-spacers, 80×1,0 mm	2	**732-1700**
T-spacers, 80×1,5 mm	2	**732-1702**
T-spacers, 105×0,75 mm	2	**732-1766**
T-spacers, 105×1,0 mm	2	**732-1768**
T-spacers, 105×1,5 mm	2	**732-1770**
Foam gasket, 610 mm	1	**732-1696**
Well locating decal (2 pieces)	2	**732-1749**
Hardware repair kit, incl. 2 banana plugs, 6 washers, 2 nuts, PTFE tubing 3" (3 pieces) and 4 acetyl rivets	1 KIT	**732-1754**
Upper buffer chamber cooling core (includes foam gasket)	1	**732-1755**
Lower buffer chamber for SE250	1	**732-1757**
Lower buffer chamber for SE260	1	**732-1759**
Lid with high voltage leads for SE250/SE260	1	**732-1761**

Mini vertical electrophoresis unit, SE260 Mighty Small II Deluxe

Hoefer

The SE260 Mighty Small II Deluxe mini vertical electrophoresis unit combines the advantages of small format and efficient cooling for rapid screening of proteins and nucleic acids.

- Maximum glass plate size 10×10,5 cm
- Flexible design, additionally able to accommodate 10×8 cm format with optional accessories
- Supports a wide variety of precast gels
- Efficient active cooling ensures sharp bands
- Run up to two gels (maximum 30 samples) at one time under identical conditions
- Quick and easy to assemble

Delivery information: Complete unit includes lower buffer chamber, upper buffer chamber/cooling core, safety lid with high voltage leads, casting cradle with sealing gaskets, 2× casting clamp accessories, 4× cams, 10× rectangular glass plates (10×10,5 cm), 5× notched alumina plates (10×10,5 cm), spring clamps, 2× combs (10-well, 0,75 mm thickness), and 4× spacers, 0,75 mm. Basic unit includes same as above, without the combs, spacers, plates, and caster, which can all be ordered separately.

Model	SE260-10A-.75	SE260-10A-1.5	SE260B
Glass plate size (W×H) (mm)	100×105 / 100×80		
Humidity (% RH)	< 80%		
Max power requirement	500 V, 500 mA, 12 W		
Max. temperature (°C)	45		
Unit W×H×D (mm)	165×180×160		

Model	Description	Pk	Cat. No.
SE260-10A-.75	Mighty Small II Deluxe mini vertical electrophoresis system, complete, with 0,75 mm combs and spacers	1	**732-1763**
SE260-10A-1.5	Mighty Small II Deluxe mini vertical electrophoresis system, complete, with 1,5 mm combs and spacers	1	**732-1764**
SE260B	Mighty Small II Deluxe mini vertical electrophoresis unit, basic, without combs, spacers, plates or caster	1	**732-1765**

Description	Pk	Cat. No.
Standard combs		
Standard comb, 5-well, 13,0×0,75 mm	1	**732-1728**
Standard comb, 5-well, 13,0×1,0 mm	1	**732-1732**
Standard comb, 5-well, 13,0×1,5 mm	1	**732-1734**
Standard comb, 9-well, 5,8×1,0 mm	1	**732-1737**
Standard comb, 10-well, 4,8×0,75 mm	1	**732-1705**
Standard comb, 10-well, 4,8×1,0 mm	1	**732-1707**
Standard comb, 10-well, 4,8×1,5 mm	1	**732-1710**
Standard comb, 12-well, 4,75×1,0 mm	1	**732-1714**
Standard comb, 15-well, 2,9×0,75 mm	1	**732-1716**
Standard comb, 15-well, 2,9×1,0 mm	1	**732-1719**
Standard comb, 15-well, 2,9×1,5 mm	1	**732-1723**
Standard comb, 18-well, 2,9×1,0 mm	1	**732-1727**
Preparative combs		
Preparative comb, 2-well (1× prep-large and 1× reference-small), 0,75 mm	1	**732-1740**
Preparative comb, 2-well (1× prep-large and 1× reference-small), 1,0 mm	1	**732-1745**
Preparative comb, 2-well (1× prep-large and 1× reference-small), 1,5 mm	1	**732-1748**
Accessories and spare parts		
Dual gel caster for plates 10×8 cm and 10×10,5 cm	1	**732-2382**
Spirit level	1	**732-1952**
T-spacers, 80×0,75 mm	2	**732-1698**
T-spacers, 80×1,0 mm	2	**732-1700**
T-spacers, 80×1,5 mm	2	**732-1702**
T-spacers, 105×0,75 mm	2	**732-1766**
T-spacers, 105×1,0 mm	2	**732-1768**
T-spacers, 105×1,5 mm	2	**732-1770**
Foam gasket, 610 mm	1	**732-1696**
Well locating decal (2 pieces)	2	**732-1749**
Hardware repair kit, incl. 2 banana plugs, 6 washers, 2 nuts, PTFE tubing 3" (3 pieces) and 4 acetyl rivets	1 KIT	**732-1754**
Upper buffer chamber cooling core (includes foam gasket)	1	**732-1755**
Lower buffer chamber for SE250	1	**732-1757**
Lower buffer chamber for SE260	1	**732-1759**
Lid with high voltage leads for SE250/SE260	1	**732-1761**

Large format vertical gel electrophoresis system, SE900
Hoefer

The SE900 is designed as a dedicated unit for 2-D electrophoretic separation. It can accommodate up to six 28 cm SDS-PAGE gels, making it ideal for high throughput applications.

- No upper buffer chamber means no gasket issues and no risk of buffer loss
- External cooling and internal buffer circulation ensures an even, constant, and uniform temperature for reproducible results
- Glass plate sandwiches are hinged cassettes, which allows for rapid and easy assembly before use
- Built-in draining port avoids lifting of a heavy buffer-filled tank
- Assembly of the tank is easy – no clamps needed
- Innovative design enables re-use of tank buffer, decreasing buffer consumption and reducing cost

Delivery information: Complete system includes separation tank, tubing kit, safety lid with high voltage leads, multiple gel caster, internal PAGE rack, and 6× hinged glass cassettes. Basic system is supplied without the multiple gel caster or hinged glass cassettes.

Model	SE900B	SE900-1.0
Gel size W×H (mm)	250×200	
Glass plate size (W×H) (mm)	280×210	
Humidity (% RH)	< 80%	
Max power requirement	600 V, 1000 mA, 150 W	
Max. temperature (°C)	45	
Unit W×H×D (mm)	430×430×200	
Weight (kg)	13,6	

Model	Description	Pk	Cat. No.
SE900B	Large format vertical electrophoresis system, basic	1	**732-2187**
SE900-1.0	Large format vertical electrophoresis system, complete, with 1,0 mm combs and spacers	1	**732-2186**

Description	Pk	Cat. No.
Accessories and spare parts		
Hinged glass cassette, SE9102, 280×210×1 mm	1	**732-2182**
Large format PAGE multiple gel caster for use with SE9102 cassettes	1	**732-2178**
Caster clamps, pack of 4	4	**732-2163**
Gel plate rack, for holding up to 14 large format gel cassettes	1	**732-2179**
Tubing kit	1 KIT	**732-2183**
Replacement high voltage leads	2	**732-2169**
Replacement lid with high voltage leads	1	**732-2184**
Internal PAGE rack	1	**732-2185**
Lower buffer chamber with pump assembly	1	**732-2177**
Drain filters	1	**732-2176**
Plate separation tool, Wonder wedge™	1	**732-2150**
Separator sheets	1	**732-2180**
Space saver plate	1	**732-2181**
Gel seal	1	**732-2171**

Tall standard dual cooled vertical electrophoresis unit, SE660
Hoefer

Taller format accommodates 24 cm long gels for increased resolution.

- Maximum glass plate size 18×24 cm
- Produce straight lanes and sharp, well defined bands
- Run up to four gels (maximum 112 samples) at one time under identical conditions
- Run gels at uniform temperature from 1 to 45 °C
- Accommodates denaturing and native polyacrylamide gels and 2-D electrophoresis
- A wide array of accessories allows gel configurations to be tailored to individual needs

Delivery information: Complete system includes lower buffer chamber, upper buffer chamber, safety lid with high voltage leads, heat exchanger, 6× glass plates (18×24 cm), 4× clamp assemblies (16 cm), 6× cams, 2× slotted gaskets for upper buffer chamber, dual gel casting stand with levelling base, bubble level, 2× laminated gaskets for caster, buffer dam, alignment template, plate separation tool, gel seal, 2× combs (15-well, 1,5 mm thick), and 4× spacers (2 cm wide, 1,5 mm thick). The basic unit is supplied without combs and 24 cm long spacers, both of which can be ordered separately.

Model	SE660B	SE660-15-1.5
Glass plate size (W×H) (mm)	180×240 / 180×160 / 180×80	
Humidity (% RH)	<80%	
Max power requirement	1000 V, 500 mA, 50 W	
Max. temperature (°C)	45	
Unit W×H×D (mm)	320×370×140	

Model	Description	Pk	Cat. No.
SE660B	Tall standard dual cooled vertical electrophoresis unit, basic	1	**732-2174**
SE660-15-1.5	Tall standard dual cooled vertical electrophoresis unit, complete, with 1,5 mm combs and spacers	1	**732-2175**

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Description	Pk	Cat. No.
Accessories and spare parts		
Upper buffer chamber for SE600 series	1	**732-1924**
Lower buffer chamber for SE660	1	**732-2188**
Clamp and cam kit, (includes 4× clamp assembly, 16 cm, 8× cams)	1 KIT	**732-1921**
Clamp assembly, 16 cm, pack of 2	2	**732-1920**
Buffer dam	1	**732-1923**
Grommets	4	**732-1925**
Heat exchanger for SE600 series	1	**732-1937**
Glass tube with 2 grommets	1	**732-1938**
Cams, black, for clamps with cam holes, pack of 4	4	**732-2167**
Clamp assembly 8 cm, pack of 2	2	**732-2172**
Lid with high voltage leads	1	**732-2168**
Spacers, 160×10 mm, thickness 1,0 mm	2	**732-1929**
Spacers, 160×10 mm, thickness 1,5 mm	2	**732-1930**
Spacers, 160×20 mm, thickness 1,0 mm	2	**732-1932**
Spacers, 160×20 mm, thickness 1,5 mm	2	**732-1933**
Spacers, 160×20 mm, thickness 1,75 mm	2	**732-1931**
Spacers, 240×20 mm, thickness 0,75 mm	2	**732-1948**
Spacers, 240×20 mm, thickness 1,0 mm	2	**732-1949**
Spacers, 240×20 mm, thickness 1,5 mm	2	**732-1950**
Spacers, 80×20 mm, thickness 0,75 mm	2	**732-1942**
Spacers, 80×20 mm, thickness 1,0 mm	2	**732-1943**
Spacers, 80×20 mm, thickness 1,5 mm	2	**732-1944**
Slotted gaskets for upper buffer chamber, pack of 2	2	**732-2166**

Deluxe dual cooled vertical unit, SE600X Chroma™

Hoefer

The ergonomic design of the SE600X Chroma™ offers easier handling and sample introduction.

- Maximum glass plate size 18×16 cm
- Gels are fully submerged for greater temperature equilibrium
- Produce straight lanes and sharp, well defined bands
- Run up to four gels (maximum 112 samples) at one time under identical conditions
- Run gels at uniform temperature from 1 to 45 °C
- Accommodates denaturing and native polyacrylamide gels and 2-D electrophoresis

Delivery information: Complete system includes lower buffer chamber, upper buffer chamber, safety lid with high voltage leads, heat exchanger, 6× glass plates (18×16 cm), 4× clamp assemblies (16 cm), 6× cams, 2× slotted gaskets for upper buffer chamber, dual gel casting stand with levelling base, bubble level, 2× laminated gaskets for caster, buffer dam, alignment template, plate separation tool, gel seal, 2× combs (15-well, 1,5 mm thick), and 4× spacers (2 cm wide, 1,5 mm thick). The basic unit is supplied without combs and 16 cm long spacers, both of which can be ordered separately.

Model	SE600XB Chroma™	SE600X-15-1,5 Chroma™
Glass plate size (W×H) (mm)	180×160 or 180×80	
Humidity (% RH)	< 80%	
Max power requirement	1000 V, 500 mA, 50 W	
Max. temperature (°C)	45	
Unit W×H×D (mm)	320×290×140	

Model	Description	Pk	Cat. No.
SE600XB Chroma™	Deluxe dual cooled vertical electrophoresis unit, basic	1	**732-2165**
SE600X-15-1,5 Chroma™	Deluxe dual cooled vertical electrophoresis unit, complete, with 1,5 mm combs and spacers	1	**732-2164**

Description	Pk	Cat. No.
Accessories and spare parts		
Upper buffer chamber for SE600 series	1	**732-1924**
Clamp and cam kit, (includes 4× clamp assembly, 16 cm, 8× cams)	1 KIT	**732-1921**
Clamp assembly, 16 cm, pack of 2	2	**732-1920**
Buffer dam	1	**732-1923**
Heat exchanger for SE600 series	1	**732-1937**
Cams, black, for clamps with cam holes, pack of 4	4	**732-2167**
Spacers, 160×10 mm, thickness 1,0 mm	2	**732-1929**
Spacers, 160×10 mm, thickness 1,5 mm	2	**732-1930**
Spacers, 160×20 mm, thickness 1,0 mm	2	**732-1932**
Spacers, 160×20 mm, thickness 1,5 mm	2	**732-1933**
Spacers, 160×20 mm, thickness 1,75 mm	2	**732-1931**
Spacers, 240×20 mm, thickness 0,75 mm	2	**732-1948**
Spacers, 240×20 mm, thickness 1,0 mm	2	**732-1949**
Spacers, 240×20 mm, thickness 1,5 mm	2	**732-1950**
Spacers, 80×20 mm, thickness 0,75 mm	2	**732-1942**
Spacers, 80×20 mm, thickness 1,0 mm	2	**732-1943**
Spacers, 80×20 mm, thickness 1,5 mm	2	**732-1944**
Slotted gaskets for upper buffer chamber, pack of 2	2	**732-2166**

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Description	Pk	Cat. No.
Accessories and spare parts		
Glass plate, regular, 180×80 mm	2	**732-1939**
Glass plate, regular, 180×160 mm	2	**732-1926**
Glass plate, regular, 180×240 mm	2	**732-1945**
Divider glass plate, notched, 180×80 mm	1	**732-1940**
Divider glass plate, notched, 180×160 mm	1	**732-1927**
Divider glass plate, notched, 180×240 mm	1	**732-1946**
Glass plates, low fluorescence, 180×80 mm	2	**732-1941**
Glass plates, low fluorescence, 180×160 mm	2	**732-1928**
Glass plates, low fluorescence, 180×240 mm	2	**732-1947**
Lower buffer chamber for SE600X Chroma™	1	**732-2173**
Lid for SE600X Chroma™ with high voltage leads	1	**732-2170**

Standard dual cooled vertical electrophoresis unit, SE600

Hoefer

The SE600 is ideal for all standard electrophoresis separations.

- Maximum glass plate size 18×16 cm
- Produce straight lanes and sharp, well defined bands
- Run up to four gels (maximum 112 samples) at one time under identical conditions
- Run gels at uniform temperature from 1 to 45 °C
- Accommodates denaturing and native polyacrylamide gels and 2-D electrophoresis
- A wide array of accessories allows gel configurations to be tailored to individual needs

Delivery information: Complete system includes lower buffer chamber, upper buffer chamber, safety lid with high voltage leads, heat exchanger, 6× glass plates (18×16 cm), 4× clamp assemblies (16 cm), 6× cams, 2× slotted gaskets for upper buffer chamber, dual gel casting stand with levelling base, bubble level, 2× laminated gaskets for caster, buffer dam, alignment template, plate separation tool, gel seal, 2× combs (15-well, 1,5 mm thick), and 4× spacers (2 cm wide, 1,5 mm thick). The basic unit is supplied without combs and 16 cm long spacers, both of which can be ordered separately.

Model	SE600B	SE600-15-1.5
Glass plate size (W×H) (mm)	180×160 / 180×80	
Humidity (% RH)	<80%	
Max power requirement	1000 V, 500 mA, 50 W	
Max. temperature (°C)	45	
Unit W×H×D (mm)	320×290×140	

Model	Description	Pk	Cat. No.
SE600B	Standard dual cooled vertical electrophoresis unit, basic	1	**732-1918**
SE600-15-1.5	Standard dual cooled vertical electrophoresis unit, complete, with 1,5 mm combs and spacers	1	**732-1919**

Description	Pk	Cat. No.
Accessories and spare parts		
Upper buffer chamber for SE600 series	1	**732-1924**
Lower buffer chamber for SE600	1	**732-1936**
Clamp and cam kit, (includes 4× clamp assembly, 16 cm, 8× cams)	1 KIT	**732-1921**
Clamp assembly, 16 cm, pack of 2	2	**732-1920**
Buffer dam	1	**732-1923**
Spacer mate	3	**732-1934**
Heat exchanger for SE600 series	1	**732-1937**
Dual gel caster for 8, 16 or 24 cm long gels	1	**732-1922**
Spacers, 160×10 mm, thickness 1,0 mm	2	**732-1929**
Spacers, 160×10 mm, thickness 1,5 mm	2	**732-1930**
Spacers, 160×20 mm, thickness 1,0 mm	2	**732-1932**
Spacers, 160×20 mm, thickness 1,5 mm	2	**732-1933**
Spacers, 160×20 mm, thickness 1,75 mm	2	**732-1931**
Spacers, 240×20 mm, thickness 0,75 mm	2	**732-1948**
Spacers, 240×20 mm, thickness 1,0 mm	2	**732-1949**
Spacers, 240×20 mm, thickness 1,5 mm	2	**732-1950**
Spacers, 80×20 mm, thickness 0,75 mm	2	**732-1942**
Spacers, 80×20 mm, thickness 1,0 mm	2	**732-1943**
Spacers, 80×20 mm, thickness 1,5 mm	2	**732-1944**
Four gel caster (includes glass plates, 18×16 cm, pack of 8)	1	**732-1951**
Ten gel caster (includes glass plates, 18×16 cm, pack of 20)	1	**732-1935**
Glass plate, regular, 180×80 mm	2	**732-1939**
Glass plate, regular, 180×160 mm	2	**732-1926**
Glass plate, regular, 180×240 mm	2	**732-1945**
Divider glass plate, notched, 180×80 mm	1	**732-1940**
Divider glass plate, notched, 180×160 mm	1	**732-1927**
Divider glass plate, notched, 180×240 mm	1	**732-1946**
Glass plates, low fluorescence, 180×80 mm	2	**732-1941**
Glass plates, low fluorescence, 180×160 mm	2	**732-1928**
Glass plates, low fluorescence, 180×240 mm	2	**732-1947**

Wide mini vertical electrophoresis unit, SE640

Hoefer

Extra wide format ideal for quick, high throughput runs

- Maximum glass plate size 18×8 cm
- Permits rapid screening of up to 112 samples at one time
- Design permits gels to be surrounded uniformly by buffer so heat dissipation is efficient; bands are sharp and lanes are straight
- Accommodates denaturing or native polyacrylamide gels
- Run up to four second dimension gels using IEF strips or tube gels

Delivery information: Complete system includes lower buffer chamber, upper buffer chamber, safety lid with high voltage leads, glass plates 18×8 cm (6 pieces), 8 cm clamp assemblies (4 pieces), cams (6 pieces), dual casting stand with levelling base, laminated gaskets for casting stand (2 pieces), slotted gaskets for upper buffer chamber (2 pieces), buffer dam, alignment template, plate separation tool, gel seal, bubble level, combs, 15-well, 1,5 mm thick (2 pieces), 1,5 mm thick spacers, 2 cm wide (4 pieces). Basic unit includes sames as above without the combs and spacers. Combs and 8 cm long spacers can be ordered separately.

Model	SE640B	SE640-15-1.5
Glass plate size (W×H) (mm)	180×80	
Humidity (% RH)	< 80%	
Max power requirement	1000 V, 500 mA, 50 W	
Max. temperature (°C)	45	
Unit W×H×D (mm)	320×290×140	

Model	Description	Pk	Cat. No.
SE640B	Wide mini vertical electrophoresis unit, basic	1	**732-2526**
SE640-15-1.5	Wide mini vertical electrophoresis unit, complete, with 1,5 mm combs and spacers	1	**732-2375**

Description	Pk	Cat. No.
Accessories and spare parts		
Buffer dam	1	**732-2527**
Cams, black, for clamps with cam holes, pack of 4	4	**732-2167**
Clamp assembly 8 cm, pack of 2	2	**732-2172**
Lid with high voltage leads	1	**732-2168**
Lower buffer chamber	1	**732-2528**
Spacers, 160×10 mm, thickness 1,0 mm	2	**732-1929**
Spacers, 160×10 mm, thickness 1,5 mm	2	**732-1930**
Spacers, 160×20 mm, thickness 1,0 mm	2	**732-1932**
Spacers, 160×20 mm, thickness 1,5 mm	2	**732-1933**
Spacers, 160×20 mm, thickness 1,75 mm	2	**732-1931**
Spacers, 240×20 mm, thickness 0,75 mm	2	**732-1948**
Spacers, 240×20 mm, thickness 1,0 mm	2	**732-1949**
Spacers, 240×20 mm, thickness 1,5 mm	2	**732-1950**
Spacers, 80×20 mm, thickness 0,75 mm	2	**732-1942**
Spacers, 80×20 mm, thickness 1,0 mm	2	**732-1943**
Spacers, 80×20 mm, thickness 1,5 mm	2	**732-1944**
Slotted gaskets for upper buffer chamber, pack of 2	2	**732-2166**
Upper buffer chamber with dual electrode assembly	1	**732-2529**
Glass plate, regular, 180×80 mm	2	**732-1939**
Glass plate, regular, 180×160 mm	2	**732-1926**
Glass plate, regular, 180×240 mm	2	**732-1945**
Divider glass plate, notched, 180×80 mm	1	**732-1940**
Divider glass plate, notched, 180×160 mm	1	**732-1927**
Divider glass plate, notched, 180×240 mm	1	**732-1946**
Glass plates, low fluorescence, 180×80 mm	2	**732-1941**
Glass plates, low fluorescence, 180×160 mm	2	**732-1928**
Glass plates, low fluorescence, 180×240 mm	2	**732-1947**

Tall air-cooled vertical electrophoresis unit, SE410

Hoefer

Compact, rugged, and economical units ideal for educational laboratories with multiple users.

Model	SE410B	SE410-15-1.5
Glass plate size (W×H) (mm)	180×160	
Humidity (% RH)	< 80%	
Max power requirement	500 V, 60 mA, 20 W	
Max. temperature (°C)	45	
Unit W×H×D (mm)	240×360×150	

Model	Description	Pk	Cat. No.
SE410B	Tall air-cooled vertical electrophoresis unit, basic	1	**732-2515**
SE410-15-1.5	Tall air-cooled vertical electrophoresis unit, complete, with 1,5 mm combs and spacers	1	**732-2516**

Description	Pk	Cat. No.
Standard combs		
Standard comb, 10-well, 8,3×0,75 mm	1	**732-1784**
Standard comb, 10-well, 8,3×1,0 mm	1	**732-1785**
Standard comb, 10-well, 8,3×1,5 mm	1	**732-1786**
Standard comb, 12-well, 7,6×0,75 mm	1	**732-1787**
Standard comb, 12-well, 7,6×1,0 mm	1	**732-1788**
Standard comb, 12-well, 7,6×1,5 mm	1	**732-1789**
Standard comb, 15-well, 5,7×0,75 mm	1	**732-1790**
Standard comb, 15-well, 5,7×1,0 mm	1	**732-1791**
Standard comb, 15-well, 5,7×1,5 mm	1	**732-1792**
Standard comb, 20-well, 4,1×0,75 mm	1	**732-1793**
Standard comb, 20-well, 4,1×1,0 mm	1	**732-1794**
Standard comb, 20-well, 4,1×1,5 mm	1	**732-1795**
Standard comb, 28-well, 2,7×0,75 mm	1	**732-1796**
Standard comb, 28-well, 2,7×1,0 mm	1	**732-1797**
Standard comb, 28-well, 2,7×1,5 mm	1	**732-1798**
Adjustable comb back, converts 25 mm deep comb to 10 or 15 mm depth	1	**732-1799**
Preparative combs		
Preparative comb, 2-wells (1×prep and 1×reference), 0,75 mm	1	**732-1915**
Preparative comb, 2-wells (1×prep and 1×reference), 1,0 mm	1	**732-1916**
Preparative comb, 2-wells (1×prep and 1×reference), 1,5 mm	1	**732-1917**
Preparative comb, 3-well (1×prep and 2×reference), 0,75 mm	1	**732-1800**
Preparative comb, 3-well (1×prep and 2×reference), 1,0 mm	1	**732-1913**
Preparative comb, 3-well (1×prep and 2×reference), 1,5 mm	1	**732-1914**
Accessories and spare parts		
Laminated gasket (for casting stand)	1	**732-2512**
Lid with electrodes for SE400	1	**732-2519**
Lid with electrodes for SE410	1	**732-2520**
Lower buffer chamber/casting stand on levelling base with high voltage leads	1	**732-2517**
Slotted gasket (for upper buffer chamber)	1	**732-2511**
Upper buffer chamber for SE400 series	1	**732-2518**
Cams, black, for clamps with cam holes, pack of 4	4	**732-2167**
Clamp assembly 8 cm, pack of 2	2	**732-2172**
Spacers, 160×10 mm, thickness 1,0 mm	2	**732-1929**
Spacers, 160×10 mm, thickness 1,5 mm	2	**732-1930**
Spacers, 160×20 mm, thickness 1,0 mm	2	**732-1932**
Spacers, 160×20 mm, thickness 1,5 mm	2	**732-1933**
Spacers, 160×20 mm, thickness 1,75 mm	2	**732-1931**
Spacers, 240×20 mm, thickness 0,75 mm	2	**732-1948**
Spacers, 240×20 mm, thickness 1,0 mm	2	**732-1949**
Spacers, 240×20 mm, thickness 1,5 mm	2	**732-1950**
Spacers, 80×20 mm, thickness 0,75 mm	2	**732-1942**
Spacers, 80×20 mm, thickness 1,0 mm	2	**732-1943**
Spacers, 80×20 mm, thickness 1,5 mm	2	**732-1944**
Glass plate, regular, 180×80 mm	2	**732-1939**
Glass plate, regular, 180×160 mm	2	**732-1926**

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Description	Pk	Cat. No.
Accessories and spare parts		
Glass plate, regular, 180×240 mm	2	**732-1945**
Divider glass plate, notched, 180×80 mm	1	**732-1940**
Divider glass plate, notched, 180×160 mm	1	**732-1927**
Divider glass plate, notched, 180×240 mm	1	**732-1946**
Glass plates, low fluorescence, 180×80 mm	2	**732-1941**
Glass plates, low fluorescence, 180×160 mm	2	**732-1928**
Glass plates, low fluorescence, 180×240 mm	2	**732-1947**

Air cooled vertical electrophoresis unit, SE400

Hoefer

Compact, rugged, and economical units ideal for educational laboratories with multiple users.

Model	SE400B	SE400-15-1.5
Glass plate size (W×H) (mm)	180×240	
Humidity (% RH)	< 80%	
Max power requirement	500 V, 60 mA, 20 W	
Max. temperature (°C)	45	
Unit W×H×D (mm)	240×280×150	

Model	Description	Pk	Cat. No.
SE400B	Air-cooled vertical electrophoresis unit, basic	1	**732-2509**
SE400-15-1.5	Air-cooled vertical electrophoresis unit, complete, with 1,5 mm combs and spacers	1	**732-2510**

Description	Pk	Cat. No.
Standard combs		
Standard comb, 10-well, 8,3×0,75 mm	1	**732-1784**
Standard comb, 10-well, 8,3×1,0 mm	1	**732-1785**
Standard comb, 10-well, 8,3×1,5 mm	1	**732-1786**
Standard comb, 12-well, 7,6×0,75 mm	1	**732-1787**
Standard comb, 12-well, 7,6×1,0 mm	1	**732-1788**
Standard comb, 12-well, 7,6×1,5 mm	1	**732-1789**
Standard comb, 15-well, 5,7×0,75 mm	1	**732-1790**
Standard comb, 15-well, 5,7×1,0 mm	1	**732-1791**
Standard comb, 15-well, 5,7×1,5 mm	1	**732-1792**
Standard comb, 20-well, 4,1×0,75 mm	1	**732-1793**
Standard comb, 20-well, 4,1×1,0 mm	1	**732-1794**
Standard comb, 20-well, 4,1×1,5 mm	1	**732-1795**
Standard comb, 28-well, 2,7×0,75 mm	1	**732-1796**
Standard comb, 28-well, 2,7×1,0 mm	1	**732-1797**
Standard comb, 28-well, 2,7×1,5 mm	1	**732-1798**
Adjustable comb back, converts 25 mm deep comb to 10 or 15 mm depth	1	**732-1799**
Preparative combs		
Preparative comb, 2-wells (1×prep and 1×reference), 0,75 mm	1	**732-1915**
Preparative comb, 2-wells (1×prep and 1×reference), 1,0 mm	1	**732-1916**
Preparative comb, 2-wells (1×prep and 1×reference), 1,5 mm	1	**732-1917**
Preparative comb, 3-well (1×prep and 2×reference), 0,75 mm	1	**732-1800**
Preparative comb, 3-well (1×prep and 2×reference), 1,0 mm	1	**732-1913**
Preparative comb, 3-well (1×prep and 2×reference), 1,5 mm	1	**732-1914**
Accessories and spare parts		
Spacer mate	3	**732-1934**
Electrode with two connectors	1 SET	**732-2514**
Laminated gasket (for casting stand)	1	**732-2512**
Levelling set (feet and fasteners)	1 SET	**732-2513**
Lid with electrodes for SE400	1	**732-2519**
Lid with electrodes for SE410	1	**732-2520**
Lower buffer chamber/casting stand on levelling base with high voltage leads	1	**732-2517**
Slotted gasket (for upper buffer chamber)	1	**732-2511**
Upper buffer chamber for SE400 series	1	**732-2518**
Dual gel caster for 8, 16 or 24 cm long gels	1	**732-1922**

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Description	Pk	Cat. No.
Accessories and spare parts		
Cams, black, for clamps with cam holes, pack of 4	4	**732-2167**
Clamp assembly 8 cm, pack of 2	2	**732-2172**
Spacers, 160×10 mm, thickness 1,0 mm	2	**732-1929**
Spacers, 160×10 mm, thickness 1,5 mm	2	**732-1930**
Spacers, 160×20 mm, thickness 1,0 mm	2	**732-1932**
Spacers, 160×20 mm, thickness 1,5 mm	2	**732-1933**
Spacers, 160×20 mm, thickness 1,75 mm	2	**732-1931**
Spacers, 240×20 mm, thickness 0,75 mm	2	**732-1948**
Spacers, 240×20 mm, thickness 1,0 mm	2	**732-1949**
Spacers, 240×20 mm, thickness 1,5 mm	2	**732-1950**
Spacers, 80×20 mm, thickness 0,75 mm	2	**732-1942**
Spacers, 80×20 mm, thickness 1,0 mm	2	**732-1943**
Spacers, 80×20 mm, thickness 1,5 mm	2	**732-1944**
Four gel caster (includes glass plates, 18×16 cm, pack of 8)	1	**732-1951**
Ten gel caster (includes glass plates, 18×16 cm, pack of 20)	1	**732-1935**
Glass plate, regular, 180×80 mm	2	**732-1939**
Glass plate, regular, 180×160 mm	2	**732-1926**
Glass plate, regular, 180×240 mm	2	**732-1945**
Divider glass plate, notched, 180×80 mm	1	**732-1940**
Divider glass plate, notched, 180×160 mm	1	**732-1927**
Divider glass plate, notched, 180×240 mm	1	**732-1946**
Glass plates, low fluorescence, 180×80 mm	2	**732-1941**
Glass plates, low fluorescence, 180×160 mm	2	**732-1928**
Glass plates, low fluorescence, 180×240 mm	2	**732-1947**

2-D electrophoresis systems, complete packages
Hoefer

Description	Pk	Cat. No.
Mini 2-D electrophoresis system package includes IEF unit, SE260 Mighty Small II mini deluxe vertical unit, 2×T-spacers, 1 mm thick, and PS300B power supply (300 V)	1	**732-2162**
Standard 2-D electrophoresis system package includes IEF unit, SE600X deluxe dual cooled vertical unit, and PS300B power supply (300 V)	1	**732-2161**
Large 2-D electrophoresis system package includes IEF unit, SE900 large format vertical electrophoresis unit, 6× large hinged glass cassettes, and large multiple gel caster	1	**732-2159**
Large 2-D electrophoresis system package includes IEF unit, SE900 large format vertical electrophoresis unit, 6× large hinged glass cassettes, large multiple gel caster, and PS265 power supply (600 V)	1	**732-2160**

Multiple gel casters
Hoefer

Multiple gel casters enable several gradient or homogeneous gels to be cast simultaneously.

- Pour uniform gels from the top; pump gradient gels into an inlet port at the bottom of the unit
- Sandwiches fill at the same time at the same rate from the same solution
- Glass plate sandwiches seal leak free without the use of messy grease or tape
- Once cast, gels can be wrapped in plastic and refrigerated for several weeks

Delivery information: Combs and spacers must be ordered separately.

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Model	Description	Pk	Cat. No.
SE215	Ten gel caster for 10×8 cm plates, (includes 10×8 cm rectangular glass plates, 20 pcs; 10×8 cm notched alumina plates, 10 pcs; spring clamps, 2 pcs)	1	**732-2498**
SE275	Four gel caster for 10×8 cm plates (includes 10×8 cm rectangular glass plates, 10 pcs; 10×8 cm notched alumina plates, 4 pcs; spring clamps, 2 pcs)	1	**732-2507**
SE235	Four gel caster for 10×10,5 cm plates (includes 10×10,5 cm rectangular glass plates, 5 pcs; 10×10,5 cm notched alumina plates, 4 pcs; spring clamps, 4 pcs)	1	**732-2503**
SE675	Four gel caster (includes glass plates, 18×16 cm, pack of 8)	1	**732-1951**
SE615	Ten gel caster (includes glass plates, 18×16 cm, pack of 20)	1	**732-1935**

Description	Pk	Cat. No.
Replacement parts		
Wax paper, for SE215/SE275, pack of 100	100	**732-2495**
Wax paper, for SE235, pack of 100	100	**732-2501**
Wax paper, for SE615/SE675, pack of 100	100	**732-2523**
Filler plug set, for SE215	1 SET	**732-2496**
Filler plug set, for SE235/SE275	1 SET	**732-2508**
Filler plug set, for SE615	1	**732-2525**
Filler plug set, for SE675	1 SET	**732-2530**
Filler sheets, PC, for SE215/SE275, pack of 5	5	**732-2497**
Filler sheet, PC, for SE235, pack of 5	5	**732-2502**
Filler sheet, PC, for SE615/SE675, pack of 5	5	**732-2522**
Space saver plate, for SE215/SE275	1	**732-2499**
Space-saver plate, for SE235	1	**732-2504**
Space saver plate, for SE615/SE675	1	**732-2521**
Face plate, for SE215/SE275	1	**732-2500**
Face plate, for SE235	1	**732-2505**
Face plate, for SE615/SE675	1	**732-2524**
Spring clamps, for SE615/SE675, pack of 4	4	**732-2506**

Dual Cool electrophoresis system, DCX-700

C.B.S. Scientific

This mini-vertical electrophoresis system can accommodate both slab gel electrophoresis and Western blotting within the same unit, without the need to purchase additional modules. The Dual Cool system has the capability to run two gels or two blots simultaneously under identical temperature controlled buffer conditions. The system is designed primarily for use with precast gels in sizes 100×100, 100×90, or 100×80 mm. Alternatively, hand-cast gels can be run with the use of accessory combs, plates, and spacers. Applications include SDS-PAGE, electroblotting (Western blots) and acrylamide nucleic acid separations.

- Dual capacity with dual function - two slab gels or two electrophoretic transfers can be accomplished in the same unit
- Hinged core design allows easy loading and removal of gel or blotting cassettes
- Freezer blocks fit into receptacles inside the unit for optional cooling
- Colour coded anode and cathode for safety
- Transparent tank allows for monitoring of sample progress

Delivery information: Each system includes lower buffer reservoir, core tank that accommodates 2 gels or 2 blotting cassettes, safety cover with attached power leads, 2 blotting cassettes with foam pads, 2 freezer blocks and an adapter plate (for running 1 gel at a time).

Description	Pk	Cat. No.
Dual Cool system, DCX-700	1	**730-0908**

Description	Pk	Cat. No.
Accessories for Dual Cool electrophoresis system, DCX-700		
Gel casting kit, 0,75 mm	1 KIT	**730-1284**
Gel casting kit, 1,0 mm	1 KIT	**730-1813**
Gel casting kit, 1,5 mm	1 KIT	**730-1283**
Gel Wrap® gasket 0,75 mm	1	**730-0912**
Gel Wrap® gasket 1,0 mm	1	**730-0910**
Gel Wrap® gasket 1,5 mm	1	**730-0911**
Gel Wrap® glass plate set, 100×100 mm	1	**730-0913**
Gel Wrap® spacer set 0,75 mm	1	**730-0916**
Gel Wrap® spacer set 1,0 mm	1	**730-0914**
Combs for vertical Mini Gel system (W×H): 100×80 mm and Dual Cool DCX-700		
Comb, PTFE, 0,75 mm, 1-sample	1	**730-0963**
Accessories for Dual Cool electrophoresis system, DCX-700		
Gel Wrap® spacer set 1,5 mm	1	**730-0915**
Combs for vertical Mini Gel system (W×H): 100×80 mm and Dual Cool DCX-700		
Comb, PTFE, 0,75 mm, 10-sample	1	**730-0964**
Accessories for Dual Cool electrophoresis system, DCX-700		
Single gel adapter plate	1	**730-0909**
Combs for vertical Mini Gel system (W×H): 100×80 mm and Dual Cool DCX-700		
Comb, PTFE, 0,75 mm, 14-sample	1	**730-0965**
Comb, PTFE, 1,0 mm, 1-sample	1	**730-0966**
Comb, PTFE, 1,0 mm, 10-sample	1	**730-0967**

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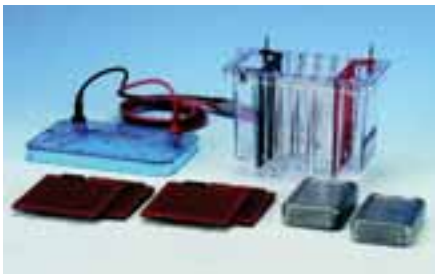
Description	Pk	Cat. No.
Accessories for Dual Cool electrophoresis system, DCX-700		
Adapter plate for Lonza gels, 100×90 mm	1	**730-0917**
Combs for vertical Mini Gel system (W×H): 100×80 mm and Dual Cool DCX-700		
Comb, PTFE, 1,0 mm, 14-sample	1	**730-0968**
Comb, PTFE, 1,5 mm, 1-sample	1	**730-0969**
Comb, PTFE, 1,5 mm, 10-sample	1	**730-0970**
Comb, PTFE, 1,5 mm, 14-sample	1	**730-0971**

Mini-vertical blotting system (4-place), EBX-700

C.B.S. Scientific



This mini-vertical blotting system can accommodate gels of dimensions 100×100, 100×90, or 100×80 mm and is capable of transferring 4 gels simultaneously under identical temperature controlled buffer conditions. The system is designed for Western blotting.

- Freezer blocks fit into compartments in the lower reservoir for cooling, eliminating the need for an external cooling apparatus
- Colour coded anode and cathode for additional safety
- Seamless moulded tank design with space for a magnetic stirring bar
- Uses less than 1 litre of buffer (cathode reservoir: 190 ml; anode reservoir: 750 ml)

Delivery information: Each unit includes 4× blotting cassettes with sponge pads, 4× freezer blocks, lower reservoir with 4× gel capacity, and safety cover with attached leads.

Description	Pk	Cat. No.
Mini-vertical blotting system (4-place), EBX-700	1	**730-0918**

Vertical Mini Gel electrophoresis systems, MGV series

C.B.S. Scientific

There are four different models in this range of Mini Gel systems designed for the electrophoresis of small polyacrylamide or agarose gels. The dual units provide the capability of running two mini-gels simultaneously under identical buffer conditions.

- Choice of two gel formats
- Small size permits rapid analysis of samples in short supply and reduces the use of expensive reagents needed for gel formation and running buffer
- Can accommodate most commercially available pre-cast gels
- Long-lasting silicone gasket(s) prevent buffer leakage during electrophoresis
- Gel Wrap® leak-proof, silicone gasket seals the glass plate sandwich for quick and easy gel casting

Gel bed dimensions (W×H): 100×80 or 113×100 mm

Delivery information: Each single system includes the unit with 1 set of glass plates, 1 set spacers with Gel Wrap®, 1 comb, and 5 white clamps. Each dual system unit includes a cooling chamber with coolant recirculation ports, 2 sets of glass plates, 2 spacer sets with Gel Wrap®, 2 combs, 10 white clamps. Both single and dual systems include a safety cover with attached power leads.

Model	Description	Pk	Cat. No.
MGV-302-U	Single vertical Mini Gel system, tank only, 100×80 mm	1	**730-1727**
MGV-302	Single vertical Mini Gel system, complete, 100×80 mm	1	**730-1726**
MGV-402-U	Dual vertical Mini Gel system, tank only, 100×80 mm	1	**730-1729**
MGV-402	Dual vertical Mini Gel system, complete, 100×80 mm	1	**730-1728**
MGV-102-U	Single vertical Mini Gel system, tank only, 113×100 mm	1	**730-1720**
MGV-102	Single vertical Mini Gel system, complete, 113×100 mm	1	**730-1718**
MGV-202-U	Dual vertical Mini Gel system, tank only, 113×100 mm	1	**730-1724**
MGV-202	Dual vertical Mini Gel system, complete, 113×100 mm	1	**730-1721**

Description	Pk	Cat. No.
Combs for vertical Mini Gel system (W×H): 100×80 mm and Dual Cool DCX-700		
Comb, PTFE, 0,75 mm, 10-sample	1	**730-0964**
Comb, PTFE, 1,0 mm, 10-sample	1	**730-0967**
Comb, PTFE, 1,0 mm, 14-sample	1	**730-0968**
Combs for vertical Mini Gel system (W×H): 113×100 mm		
Comb, PTFE, 0,5 mm, 10-well	1	**730-0946**
Comb, PTFE, 0,75 mm, 10-well	1	**730-0947**
Comb, PTFE, 1,0 mm, 10-well	1	**730-0948**
Comb, PTFE, 1,0 mm, 14-well	1	**730-0949**
Accessories for vertical mini-gel system (W×H): 100×80 mm		
Multiple Mini Gel casting chamber for 4 gels	1	**730-1614**
Multiple Mini Gel casting chamber for 10 gels	1	**730-1615**
Gel Wrap® mini glass plate set (100×80 mm), includes 1 notched plate and 1 back plate	1 SET	**730-0938**
Gel Wrap® frosted mini glass plate set (100×80 mm), includes 1 notched plate and 1 back plate	1 SET	**730-0939**
Gel Wrap® gasket, 0,5×80 mm	1	**730-0950**
Gel Wrap® gasket, 0,75×80 mm	1	**730-0952**
Gel Wrap® gasket, 1,0×80 mm	1	**730-0954**

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Description	Pk	Cat. No.
Accessories for vertical mini-gel system (W×H): 100×80 mm		
Gel Wrap® spacer set, 0,5×80 mm	1	**730-0956**
Gel Wrap® spacer set, 0,75×80 mm	1	**730-0958**
Gel Wrap® spacer set, 1,0×80 mm	1	**730-0960**
Accessories for vertical mini-gel system (W×H): 113×100 mm		
Multiple Mini Gel casting chamber for 4 gels	1	**730-0082**
Multiple Mini Gel casting chamber for 10 gels	1	**730-0083**
Gel Wrap® mini glass plate set (113×100 mm), includes 1 notched plate and 1 back plate	1 SET	**730-0936**
Gel Wrap® frosted mini glass plate set (113×100 mm), includes 1 notched plate and 1 back plate	1 SET	**730-0937**
Gel Wrap® gasket, 0,5×100 mm	1	**730-0951**
Gel Wrap® gasket, 0,75×100 m	1	**730-0953**
Gel Wrap® gasket, 1,0×100 mm	1	**730-0955**
Gel Wrap® gasket, 1,5×100 mm	1	**730-1099**
Gel Wrap® spacer set, 0,5×100 mm	1	**730-0957**
Gel Wrap® spacer set, 0,75×100 m	1	**730-0959**
Gel Wrap® spacer set, 1,0×100 mm	1	**730-0961**

For more information about the full range of C.B.S. Scientific combs and accessories available, please contact your local VWR Sales Office.

Triple Wide Mini-Vertical gel system, MGV series

C.B.S. Scientific

The Triple Wide Mini-Vertical gel system is available as either a single- or dual-sided unit and is designed for the mass screening of 204 samples (dual unit) or 102 samples (single unit). This system can also be used for research conditions requiring electrophoretic separations of large numbers of samples in a mini-vertical acrylamide format. The system lends itself well to the use of fluorescence-based assays whose images can be captured on a fluorimeter directly through optional borosilicate glass plate sets.

- Ideal for screening high volumes of samples
- Wide variety of PC combs available, including many spaced for multi channel pipette loading of samples
- Dual-sided system has coolant recirculation capabilities
- Compatible with the Triple Wide Mini-Blotter, Cat. No. 730-0072

Delivery information: Each single-sided system includes 1 set of Gel Wrap® glass plates, 1 set of Gel Wrap® spacers (0,75 mm), 1 Gel Wrap® gasket, 1 comb (0,75 mm, 31-well) and 10 white spring clips. Each double-sided system includes 2 sets of Gel Wrap® glass plates, 2 sets of Gel Wrap® spacers, 2 Gel Wrap® gaskets, 2 combs (0,75 mm, 31-well) and 20 white spring clips.

Model	Description	Pk	Cat. No.
MGV-102	Triple wide mini-vertical gel system, single-sided, 330×100 mm	1	**730-1719**
MGV-202	Triple wide mini-vertical gel system, dual-sided, 330×100 mm	1	**730-1723**
MGV-216	Triple wide mini-vertical gel system, dual-sided, 330×160 mm	1	**730-1725**

Description	Pk	Cat. No.
Accessories		
Gel Wrap® gasket, 100 mm 0,75 mm	1	**730-0930**
Gel Wrap® gasket, 160 mm 0,75 mm	1	**730-0931**
Gel Wrap® gasket, 100 mm 1,0 mm	1	**730-0932**
Gel Wrap® gasket, 160 mm 1,0 mm	1	**730-0933**
Gel Wrap® gasket, 100 mm 1,5 mm	1	**730-0934**
Gel Wrap® gasket, 160 mm 1,5 mm	1	**730-0935**
Gel Wrap® glass plate set for triple wide mini vertical systems, 330×160 mm**	1 SET	**730-0987**
Gel Wrap® spacer set, 160 mm 1,5 mm	1 SET	**730-0943**
Combs for triple wide mini vertical gel system		
Comb, PC 0,75 mm, 31-sample*	1	**730-0925**
Comb, PC 0,75 mm, 102-sample*	1	**730-0924**
Comb, PC 0,75 mm, 50-sample	1	**730-0926**
Comb, PC 1,0 mm, 31-sample*	1	**730-0928**
Comb, PC 1,0 mm, 102-sample*	1	**730-0927**
Comb, PC 1,0 mm, 50-sample*	1	**730-0929**

* Optimal for multi channel pipetting
** Low fluorescence borosilicate

Electroblotting modules for kuroGEL verti dual gel units

These electroblotters are designed to provide a safe and easy to operate system for the transfer of nucleic acid or proteins from a gel matrix onto a suitable transfer membrane. Two sizes of unit can be used to blot up to two gels of either 10×10 cm or 20×20 cm.

- Each asymmetric, colour coded compression cassette has a locking mechanism to minimise gel movement during insertion into the tank
- The asymmetry of the cassettes prevents them being inserted into the tank in the wrong orientation, against the direction of transfer

Delivery information: Each 10×10 cm module is supplied with two 10 cm compression cassettes and two small fibre pads. Each 20×20 cm module is supplied with two 20 cm compression cassettes and two large fibre pads.

Model	10×10 cm	20×20 cm
Active transfer area (cm^3)	71	289
Buffer volume (ml)	1600	4200
Distance between electrodes (mm)	60	
Unit W×D×H (mm)	200×140×150	380×150×285

Description	Pk	Cat. No.
Electroblotting module for kuroGEL Verti 1010K and 1010YK (cooled versions), 10×10 cm	1	**700-7282**
Electroblotting module for kuroGEL Verti 2020K and 2020YK (cooled versions), 20×20 cm	1	**700-7283**

Description	Pk	Cat. No.
Accessories		
Fibre pads, 100×100 mm	4	**700-7097**
Fibre pads, 200×200 mm	4	**700-7096**
Large compression cassette, 20×20 cm	1	**700-7284**

Transfer tank, TE22 Mighty Small™

Hoefer

The TE22 Mighty Small™ transfer tank is designed to quickly and efficiently transfers proteins and nucleic acids from small gels to nylon, nitrocellulose or PVDF membranes.

- Maximum gel size 9×10 cm
- Transfers as many as four small gels in less than an hour
- Built-in alumina-covered cooling channel provides excellent temperature control with no more than a 5 °C temperature increase during a typical run
- Superior tank design allows the cassettes to apply equal pressure across the stack, preventing gel distortion
- Colour coded cassettes are easy to load and handle, ensuring proper orientation during transfer
- Uniform and strong electric field supports efficient and even transfers

Delivery information: Each system includes lower chamber with heat exchanger, safety lid with high voltage leads, 2× electrode panels, 4× cassettes, 4× foam sponges (6 mm thick), 8× foam sponges (3 mm thick), cassette hook, and 25× blotting paper sheets (9×10,5 cm).

Model	TE22
Capacity	Up to four 9×10 cm gels
Gel size W×L (mm)	90×100
Unit W×D×H (mm)	140×165×240

Model	Description	Pk	Cat. No.
TE22	Mighty Small™ transfer tank, 90×100 mm	1	**732-2123**

Description	Pk	Cat. No.
Accessories and spare parts		
Repair kit, fittings and hardware	1	**732-2124**
Electrode panel	1	**732-2125**
Cassette with foam sponges	1	**732-2126**
Foam sponges, 3 mm, pack of 4	4	**732-2128**
Foam sponges, 6 mm, pack of 4	4	**732-2127**
Blotter paper, 90×105 mm, 50 sheets	50	**732-2129**
Lower chamber with heat exchanger	1	**732-2130**
Safety lid with high voltage leads	1	**732-2131**

Tank blotters

C.B.S. Scientific

Suitable for Western, Southern and Northern Blotting, this range of tank blotters includes units which can hold up to four gel cassettes and others which can transfer gels as large as 150×215 mm. All blotters feature an internal glass cooling base for temperature controlled runs, and safety cover with power leads.

- Platinum electrode wires mounted into grooves 2,5 cm apart on acrylic panels for uniform electrophoretic transfer and easy disassembly and cleaning
- Cassette assembly consists of two hinged, perforated fibreglass panels and two Scotch Brite® pads between which the gel and nitrocellulose, or other derivatised paper, are placed
- Stirring bar can be placed beneath cassettes to allow buffer circulation and heat exchange during electrophoresis

Model	EBU-102	EBU-402	EBU-302	EBU-204
Gel size W×L (mm)	150×215	200×100	90×330	90×110
Main unit components	Standard tank blotter with 3 gel capacity, includes chamber with 2 platinum wire electrode panels, and 1 gel cassette (additional cassettes may be ordered)	Double wide mini blotter with capacity for 2 gels, includes chamber with 2 removable electrode panels, and 1 gel cassette (additional cassettes may be ordered)	Triple wide blotter with capacity for 2 gels, includes chamber with 2 removable electrode panels, and 1 gel cassette (additional cassettes may be ordered)	Mini blotter with capacity for 4 gels, includes chamber, 2 platinum wire electrode panels, and 4 gel cassettes

Model	Description	Pk	Cat. No.
EBU-102	Blotting system with platinum electrodes and one gel cassette	1	**730-0069**
EBU-402	Double wide mini blotting system with platinum electrodes and one gel cassette	1 KIT	**730-0735**
EBU-302	Triple wide blotting system with platinum electrodes and one gel cassette	1	**730-0072**
EBU-204	Mini blotting system with platinum electrodes and four gel cassettes	1	**730-1110**

Description	Pk	Cat. No.
Accessories		
Blotting cassette for EBU-402, 90×200 mm	1	**730-0733**
Blotting cassette for EBU-302, 90×328 mm	1	**730-0065**
Blotting cassette for EBU-102, 150×215 mm	1	**730-0063**
Scotch Brite® mats for 90×328 mm cassette	2	**730-0068**
Scotch Brite® mats for 150×215 mm cassette	2	**730-0066**

VWR COLLECTION

SELECTED FOR YOU

Semi-dry blotter, kuroGEL

The kuroGEL semi-dry blotter provides great flexibility in a laboratory since it can be used for all types of blotting: Western, Southern, and Northern. Blotting is fast and easy, and can typically be completed in 15 to 30 minutes. Set up procedures are easy and economical with little buffer needed. The screw down lid adjusts to varying gel thicknesses and sizes, while the platinum coated electrodes provide uniform pressure ensuring even transfers.

- Suitable for Western, Southern, and Northern blots
- Rapid transfer times
- Uniform heat dispersion
- Variable gel thickness
- Minimal buffer volume

Delivery information: Each unit includes base with plate electrode, lid with plate electrode, electrical leads, and 2 unit screws.

Model	kuroGEL semi-dry blotter
Buffer volume (ml)	20
Capacity	4 blots: 80×85 mm 2 blots: 160×85 mm 1 blot: 150×175 mm
Unit W×D×H (mm)	325×250×55

Description	Pk	Cat. No.
Semi-dry blotter, kuroGEL	1	**700-0416**

Semi-dry blotter, 20×20 cm

This unit is manufactured from rugged acrylic components and built to comply with all statutory safety regulations. One electrode is manufactured from stainless steel and the other from platinised titanium, therefore making them virtually corrosion-free. This prevents deposits being placed on the membrane and the electrodes will last almost indefinitely, as they will not deteriorate. The unit is designed to produce a uniform system for the transfer of proteins and nucleic acids.

- Very low buffer volume and current (0.8 mA per cm^2) of the gel produces very little heat, preventing band distortion
- Transfers can be achieved in less than an hour depending on the molecular weight of the molecules to transfer
- Either single gels or multiple gel stacks can be used

Unit W×L×H: 275×265×65 mm

Description	Pk	Cat. No.
Semi-dry blotting unit for gels up to 20×20 cm	1	**700-7156**

Semi-dry blotter
C.B.S. Scientific

These semi-dry blotters are available in two sizes with transfer capabilities for gel dimensions up to 200×200 mm or 350×450 mm. They are designed for transfer of either Western, Northern, or Southern blots reliably and quickly.

- Durable and corrosion free, stainless steel cathode and platinum-coated titanium anode create a uniform electric field producing excellent transfers onto nitrocellulose or nylon substrates
- Upper electrode housing is separate from the base, allowing it to be secured at the desired height with side hand screws
- Designed to permit several gels to be transferred simultaneously
- Blotting is accomplished by layering transfer membrane and gel between buffer saturated blotting paper, minimising the amount of buffer required
- To prevent drawing current away from the gel during a transfer, the uncovered portion of the cathode is shielded with a Mylar® cut-out, which ensures that all applied current passes directly through the gel

Description	Size	Pk	Cat. No.
Semi-dry blotter	200×200	1	**730-0073**
Semi-dry blotter	350×450	1	**730-0074**

Description	Pk	Cat. No.
Accessories		
Mylar® cut-out, 200×200 mm	1	**730-0995**
Mylar® cut-out, 350×450 mm	1	**730-0996**

Semi-dry transfer units, TE70X and TE77X
Hoefer

The TE70X and TE77X Semi-Dry Transfer Units use minimal buffer to transfer proteins from polyacrylamide gels in less than an hour. The units support as many as two layers of gels being transferred simultaneously.

- Included safety circuit breaker limits voltage and current from the users power supply, preventing electrical damage to the transfer unit
- Requires minimal current so does not generate the excessive heat that can dry out the transfer stack and halt transfer or damage transfer units
- Durable iridium oxide and stainless steel electrodes allow for contamination-free, consistent transfer
- Vented electrodes prevent build-up of bubbles which may impair transfer
- Minimal buffer requirements reduce reagent cost and preparation time

Delivery information: Both units include moulded base with platinum coated titanium anode and high voltage leads, hinged lid with stainless steel cathode, and 50× porous cellophane sheets (20×35,5 cm). In addition, TE70X includes 25× blotting paper sheets (14×16 cm) and 2× Mylar® masks (16,5×18,5 cm). TE77X includes 25× blotting paper sheets (21×26 cm) and 2× Mylar® masks (23×27,5 cm).

Model	TE70X	TE77X
Capacity	Up to 4 mini gels (14×16 cm) using stacked format	Up to 12 mini gels (21×26 cm)
Unit W×D×H (mm)	380×90×460	

Model	Description	Pk	Cat. No.
TE70X	Semi-dry transfer unit, 140×160 mm	1	**732-2143**
TE77X	Large semi-dry transfer unit, 210×260 mm	1	**732-2148**

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Description	Pk	Cat. No.
Accessories and spare parts		
Porous cellophane (20×35,5 cm), 50 sheets	50	**732-2144**
Mylar® masks (16,5×18,5 cm), pack of 4	4	**732-2145**
Blotter paper (14×16 cm), 25 sheets	25	**732-2147**
Large blotter paper (21×26 cm), 25 sheets	25	**732-2146**
Large Mylar® masks (23×27,5 cm), pack of 4	4	**732-2149**

Semi-dry transfer units, TE70XP and TE77XP

Hoefer

The TE70XP and TE77XP Semi-Dry Transfer Units include an intelligent built-in power supply, which automatically monitors the transfer status, stopping the transfer before the stack overheats.

- Intelligent built-in power supply prevents the stack from overheating by monitoring the transfer status
- Requires minimal current so does not generate the excessive heat that can dry out the transfer stack and halt transfer or damage transfer units
- Durable iridium oxide and stainless steel electrodes allow for contamination-free, consistent transfer
- Vented electrodes prevent build-up of bubbles which may impair transfer
- Minimal buffer requirements reduce reagent cost and preparation time

Delivery information: Both systems include moulded base with platinum coated titanium anode and internal power supply, hinged lid with stainless steel cathode, and 50× porous cellophane sheets (20×35,5 cm). In addition, TE70XP includes 25× blotting paper sheets (14×16 cm) and 2× Mylar® masks (16,5×18,5 cm). TE77XP includes 25× blotting paper sheets (21×26 cm) and 2× Mylar® masks (23×27,5 cm).

Model	TE70XP	TE77XP
Capacity	Up to 4 mini gels using stacked format	Up to 12 mini gels
Unit W×D×H (mm)	380×90×460	

Model	Description	Pk	Cat. No.
TE70XP	Semi-dry transfer unit with built-in power supply, 140×160 mm	1	**732-2189**
TE77XP	Large semi-dry transfer unit with built-in power supply, 210×260 mm	1	**732-1667**

Description	Pk	Cat. No.
Accessories and spare parts		
Porous cellophane (20×35,5 cm), 50 sheets	50	**732-2144**
Mylar® masks (16,5×18,5 cm), pack of 4	4	**732-2145**
Blotter paper (14×16 cm), 25 sheets	25	**732-2147**
Large blotter paper (21×26 cm), 25 sheets	25	**732-2146**
Large Mylar® masks (23×27,5 cm), pack of 4	4	**732-2149**

Nytran® SuPerCharge TurboBlotter™
Whatman (GE Healthcare)

The TurboBlotter™ system is a rapid, downward blotting device for high-resolution transfer of DNA and RNA. The conventional Northern/Southern transfer stack has been turned upside down in order to take advantage of gravity.

- Rapid - downward capillary transfer allows for alkaline buffer transfers in one hour and neutral (SSC) transfers in three hours
- Economical - reusable blotting device requires less buffer and blotting paper, and refill packs are available
- Compact - has a small footprint and is stackable for multiple, simultaneous transfers
- Efficient - no heavy weights are required on the top of the transfer stack, eliminating the messy set-up of standard upward capillary transfers
- Easy to use - simple to set up and works without power or vacuum

Each TurboBlotter™ system contains a transfer device, as well as the blotting paper and membranes for five transfers. The refill packs contain the blotting paper and membranes for five transfers.

Description	Size	Pk	Cat. No.
Nytran® SuPerCharge TurboBlotter™ 120×160 mm, for gels from 70×80 mm to 110×140 mm			
Nytran® SuPerCharge TurboBlotter™ kit*	70×100	1	**732-4080**
Nytran® SuPerCharge TurboBlotter™ kit*	100×150	1	**732-4067**
Nytran® SuPerCharge TurboBlotter™ refill**	100×150	1	**732-4068**
Nytran® SuPerCharge TurboBlotter™ kit*	110×140	1	**732-4069**
Nytran® SuPerCharge TurboBlotter™ refill**	110×140	1	**732-4070**
Nytran® SuPerCharge TurboBlotter™ 210×260 mm, for gels from 120×210 mm to 200×250 mm			
Nytran® SuPerCharge TurboBlotter™ refill**	120×210	1	**732-4072**
Nytran® SuPerCharge TurboBlotter™ refill**	150×150	1	**732-4074**
Nytran® SuPerCharge TurboBlotter™ kit*	150×200	1	**732-4075**
Nytran® SuPerCharge TurboBlotter™ refill**	150×200	1	**732-4076**
Nytran® SuPerCharge TurboBlotter™ kit*	200×250	1	**732-4078**
Nytran® SuPerCharge TurboBlotter™ refill**	200×250	1	**732-4079**

* Each TurboBlotter™ kit includes: Transfer device, 5 sheets of membrane, 40 sheets of 3MM Chr, 100 sheets of GB004, and 5 wicks of 3 MM Chr
** TurboBlotter™ refills include: 5 sheets of membrane, 40 sheets of 3MM Chr, 100 sheets of GB004 and 5 wicks of 3 MM Chr

VWR COLLECTION

SELECTED FOR YOU

Dot and slot blotters

Machined from high density acrylic with precision lapped mating surfaces to ensure uniform filter contact, these manifolds are designed for DNA and RNA membrane hybridisations and antigen/antibody screening in immunological applications. Each manifold consists of paired upper dot- or slot-forming modules and a lower vacuum chamber module. A vacuum of approximately 600 mm Hg (0.8 bar) is required during sample application.

- Simple construction, easy to assemble by aligning the mating screws and tightening the stainless steel thumbscrews
- Marked with an alphanumeric grid for sample identification

Description	Pk	Cat. No.
96-well dot blot hybridisation manifold in 8×12 arrays, consisting of paired dot-forming modules (dots Ø 3 mm) and a lower vacuum chamber module	1	**700-7094**
48-well slot blot hybridisation manifold in 3×16 arrays, consisting of paired slot-forming modules (slots 0,5×6 mm) and a lower vacuum chamber module	1	**700-7245**

Gel dryers

VWR gel dryers are available in two sizes and can accommodate gels up to 45×34 cm (MGD4534) and 50×40 cm (MGD5040). Each unit is light and robust, with the base unit manufactured in cast aluminium and the control panel in stainless steel. This ensures even heat distribution and resistance to corrosion in the base, while giving strength to the control panel. A clear cover allows the drying process to be observed. The units have two timers, one for temperature and one for the vacuum pump.

- Even heat distribution via built-in 800 Watt heating membrane
- Drying temperature can be set between ambient and 90 °C (±2 °C), and drying time set up to five hours in one minute intervals
- Vacuum pump (not included*) can be timed to automatically switch off after a set period of up to five hours

W×D×H: MGD4534 570×400×110; MGD5040 630×480×120 mm

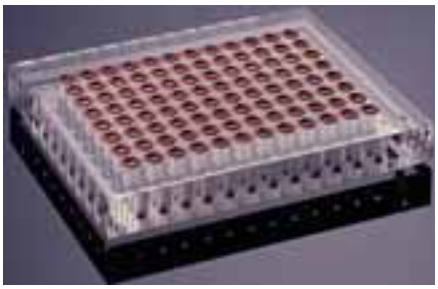
Delivery information: Each gel dryer includes a stainless steel screen, a Mylar sheet, a porous PE sheet, and a clear silicone rubber overlay sheet.

Description	Pk	Cat. No.
Gel dryer for 450×350 mm gels, MGD4534	1	**700-7124**
Gel dryer for 500×400 mm gels, MGD5040	1	**700-7125**

Description	Pk	Cat. No.
Accessories		
Mylar® sheet for model MGD4534	1	**700-7158**
Porous polyethylene sheet for model MGD4534	1	**700-7159**
Clear silicone rubber overlay for model MGD4534	1	**700-7160**
Mylar® sheet for model MGD5040	1	**700-7298**
Porous polyethylene sheet for model MGD5040	1	**700-7299**
Clear silicone rubber overlay for MGD5040	1	**700-7099**
Stainless steel screen for model MGD5040	1	**700-7100**

*For details of a suitable pump please contact your local VWR sales office.

Minifold® I systems
Whatman (GE Healthcare)



96- and 48-well acrylic manifolds for proteins and nucleic acids: Dot-, spot- and slot-blot array systems

The Minifold® I system consists of four basic components: Sample well plate, filter support plate, vacuum plenum and metal clamping plate. The sample well plate is available in three configurations for producing spots, dots or slots:

96-well spot-blot system – standard microplate format. Sample volumes as low as 25 µl can be applied, with very high signal intensity.
96-well dot-blot system – O-ring design ensures discrete dot formation without leakage of samples by cross lateral flow. Generates even, uniform dots that eliminate uneven test areas resulting from manual sample application.
48-well slot-blot system – preferred format for densitometric scanning as slots can be easily quantitated. Concentrated signal results in high signal intensity. Easy to survey format.

- Compatible with multi channel pipettes
- All three plates are interchangeable and can be purchased as an accessory or in conjunction with a complete system
- Tension on the clamping is adjustable, permitting use of a variety of blotting and filtration media

Delivery information: Each complete system includes manifold apparatus, five sheets of Protran®, and five sheets of pre-cut 3MM Chr paper.

Model	Spot-blot system – 96-well	Dot-blot system – 96-well	Slot-blot system – 48-well
Filter area	2 mm^2 spot (1×2 mm)	12,5 mm^2 dot	6,24 mm^2 slot (7,8×0,8 mm)
Material	Acrylic		
Max. capacity (µl/well)	200	500	1000
Vacuum pressure (bar)	0,9		

Description	Pk	Cat. No.
Minifold® I spot-blot system – 96-well	1	**730-0501**
Minifold® I dot-blot system – 96-well	1	**730-0502**
Minifold® I slot-blot system – 48-well	1	**732-4317**

Description	Pk	Cat. No.
Accessories		
O-rings	50	**732-4280**

Power supplies, VWR® Power Source

VWR® Power Source power supplies meet a wide range of applications, including DNA, RNA and protein electrophoresis, and blotting. Designed with safety in mind, they are loaded with the features that modern molecular biology applications demand.

Two models are available with voltage ranges to 300 V and current ranges to 3000 mA. Operating modes include constant voltage or constant current with automatic crossover. Operation can be timed or continuous.

The Power Source power supplies offer short circuit and over-current/over-voltage protection. No load and load change detection systems are incorporated into the software. Programming also includes an option for automatic recovery after a power failure.

Compact in design with a small footprint, the unit is also stackable to save space. For easy viewing and setting of parameters on the bench or on a shelf, the front of the power supply can be raised with the integral folding feet.

- Meets a wide range of applications
- Constant voltage or constant current with automatic crossover
- Timed or continuous operation
- Four sets of colour coded output terminals
- Compact design with small footprint

Model	250 V	300 V
Input voltage (V)	230	
Operating constant modes	Current, voltage, power	Current, voltage
Output current range/increments (mA)	10 - 3000/10	4 - 500/1
Output power range/increments (W)	1 - 300/1	90 max/not applicable
Output voltage range/increments (V)	5 - 250/1	2 - 300/1
Programmable	Yes	No
Timer	1 - 99 h 59 or continuous	1 - 999 minutes or continuous
Voltage (V)	0 - 250	0 - 300
Weight (kg)	2,5	2,2
W×D×H (mm)	190×250×80	

Description	Pk	Cat. No.
Power Source power supply, 250 V, UK-plug	1	**700-0116**
Power Source power supply, 300 V, UK-plug	1	**700-0113**

Power supply, PS200HC
Hoefer

The PS200HC 200 V high current power supply is ideal for large electrophoretic blotting applications and for low voltage electrophoresis runs. The small footprint, large handle, and simple operation makes the PS200HC easy to set up and use.

- Constant voltage or constant current mode with automatic crossover
- 5 - 200 V, 10 - 2000 mA, 200 W
- 4 sets of 4 mm output jacks
- Continuous runs or 999 minute timer
- Automatic recovery after power failure
- Open circuit detection
- Short circuit protection

Model	PS200HC
Current (mA)	10 - 2000
Display	LED
Input voltage (V)	100 - 240 VAC, 50/60 Hz
Operating constant modes	Current, voltage
Output voltage range/increments (V)	5 - 200/1
Outputs	4 in parallel, 4 mm sockets
Relative humidity (%)	80
Timer	0 - 999 minutes
Weight (kg)	2,4
W×D×H (mm)	125×280×335

Description	Pk	Cat. No.
PS200HC, high current power supply, 200 V	1	**732-1693**

Power supply, PS300B
Hoefer

The versatile PS300B power supply is designed for most electrophoresis techniques.

- Constant voltage or constant current mode with automatic crossover
- 10 - 300 V, 4 - 500 mA, 90 W
- 4 sets of 4 mm output jacks
- Continuous runs or 999 minute timer
- Automatic recovery after power failure
- Open circuit detection
- Short circuit protection

Model	PS300B
Current (mA)	4 - 500
Input voltage (V)	100-240 VAC, 50/60 Hz
Operating constant modes	Current, voltage
Output voltage range/increments (V)	10 - 300/1
Outputs	4 in parallel, 4 mm sockets
Relative humidity (%)	0 - 80
Timer	0 - 999 minutes
Voltage (V)	10 - 300
Weight (kg)	2,4
W×D×H (mm)	125×280×335

Description	Pk	Cat. No.
Power supply, 300 V, universal VAC	1	**732-1695**

Power supplies, EV2xx series
Consort

A complete range of power supplies for electrophoresis applications, including DNA sequencing, flat bed iso-electric focussing, horizontal and vertical gels, electro-elution, Western blotting and semi-dry blotting.

Up to nine different programmes, each with nine steps, of frequently used parameters can be stored in the non-volatile memory for future recall. All units read voltage in 1 V increments, current in 1 mA increments and power in 1 W increments. Each step is able to recall the next one, providing a flexible multiple step function for special techniques. Parameters of the running step can be changed temporarily without interrupting the run. All models also offer manual programming, automatic crossover and automatic recovery after power failure.

- All models are method programmable with up to 9 different programmes each with 9 steps
- Timer or volt-hour controlled operation: The microcomputer will automatically terminate the run and sound an alarm when the countdown to the selected value is complete
- Each model can constantly monitor the behaviour of all parameters to prevent depletion of the buffer in the electrophoresis tank by terminating the run when abnormal changes occur
- Data logging: Stores up to 3600 output values (voltage, current and power, time or volthours) including programme number and step
- All power supplies can be controlled by a computer using special commands

Ordering information: Supplied with instruction manual and mains lead. Models EV232, EV233 and EV262 include three extra pairs of 2/4 mm adapters (E200).

Model	EV231	EV232	EV233	EV265	EV202	EV215	EV261	EV262
Ambient temperature (°C)	0...+40							
Buffer depletion detection	On/off, programmable							
Current (mA)	0 - 1000	0 - 150	0 - 300	0 - 500	0 - 2000	0 - 500	0 - 1000	0 - 150
Display	LCD, 2×16 characters							
Ground leakage detection	Yes							
Load detection	On/off, programmable							
Min. load resistance (Ω)	30	600	300	30	5	15		1200
Outputs	4 in parallel, 4 mm sockets	4 in parallel, 2 mm sockets		4 in parallel, 4 mm sockets				4 in parallel, 2 mm sockets
Overload detection	Yes							
Parameter range (% full scale)	1 - 100							

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Power (W)	0 - 150			0 - 300			
Power requirements (VAC;Hz;W)	210 - 250; 50/60; 200	210 - 250; 50/60; 360	210 - 250; 50/60; 200	210 - 250; 50/60; 360			
Programs	9×9 set of parameters						
Relative humidity (%)	0 - 95, non-condensing						
Resolution (V;mA;W)	1;1;1						
Timer (h)	0 - 99:59						
Volt-hours (kVh)	0 - 99,99		0 - 99.99	0 - 99,99			
Voltage (V)	0 - 300	0 - 3000	0 - 600	0 - 300	0 - 1200	0 - 600	0 - 6000
Weight (kg)	6	10	6	10			
W×D×H (mm)	310×260×150						

Description	Pk	Cat. No.
Maxi power supplies, 150 W		
EV231 power supply, UK plug	1	**730-1124**
EV232 power supply, UK plug	1	**730-1127**
EV233 power supply, UK plug	1	**730-1130**
EV265 power supply, UK plug	1	**730-1141**
Maxi power supplies, 300 W		
EV202 power supply, UK plug	1	**730-1115**
EV215 power supply, UK plug	1	**730-1118**
EV261 power supply, UK plug	1	**730-1135**
EV262 power supply, UK plug	1	**730-1138**

Description	Pk	Cat. No.
Accessories		
Adapters, pair, 4 mm plug to 2 mm socket (E200)	1 PAIR	**730-2003**
Adapters, pair, 2 mm plug to 4 mm socket (E204)	1 PAIR	**582-2012**
Cables, pair, M/F, 4+4 mm (E201)	1 PAIR	**732-1629**
Cables, pair, M/F, 2+4 mm (E203)	1 PAIR	**582-2011**
RS232 cable	1	**732-1628**

Blotting membranes, Amersham™ Hybond™ 0.2 PVDF
GE Healthcare

Amersham™ Hybond™ 0.2 PVDF is a 0,2 µm pore size hydrophobic membrane with high physical strength. This results in significant handling advantages over unsupported nitrocellulose and makes the membrane highly suitable for stripping and reprobing. The small pore size of the membrane minimises 'blow-through' and increases protein binding over a wide range of molecular weights. Ideal for use with standard colorimetric and chemiluminescent detection methods for proteins of < Mr 20 000.

- Available in popular precut sizes
- High protein retention, even after harsh washing steps
- Protein binding capacity over 200 µg/cm² for easy signal detection
- Maximum capture of proteins during transfers minimises sample loss
- 0,2 µm pore size for higher surface area, resulting in better binding of low molecular weight proteins

For convenience, Western blotting sandwiches (10 sandwiches/package) are also available. Each sandwich consists of precut Amersham™ Hybond™ 0.2 PVDF membranes preassembled with 2×3MM Chr filter papers.

Description	Dimensions (mm)	Pk	Cat. No.
Roll	260 mm × 4 m	1	**10600021**
Sheets	80×90	25	**10600101**
Sheets	100×100	25	**10600088**
Sheets	100×100	10	**10600089**
Sheets	200×200	25	**10600057**
Sheets	200×200	10	**10600058**
Sheets	260×600	5	**10600039**
Sandwich, Hybond™ 0.2 PVDF/3MM Chr	80×90	10	**10600122**

Blotting membranes, Amersham™ Hybond™ LFP 0.2 PVDF
GE Healthcare

Amersham™ Hybond™ LFP 0.2 PVDF is a low-fluorescent, hydrophobic membrane, with 0,2 µm pore size, for protein transfer. Amersham™ Hybond™ LFP is optimised for fluorescent detection in Western blotting applications.

- Very low background fluorescence resulting in high sensitivity
- Provides low auto-fluorescence across a wide range of excitation/emission wavelengths
- Available in popular precut sizes
- Protein binding capacity >200 µg/cm²
- Compatible with a variety of blocking agents, transfer buffers, and total protein blot stains

For convenience, Western blotting sandwiches (10 sandwiches/package) are also available. Each sandwich consists of precut Amersham™ Hybond™ LFP 0.2 PVDF membranes preassembled with 2×3MM Chr filter papers.

Description	Dimensions (mm)	Pk	Cat. No.
Roll	254 mm × 4 m	1	**10600022**
Sheets	80×90	25	**10600102**
Sandwich, Hybond™ LFP 0.2 PVDF/3MM Chr	80×90	10	**10600123**
Sheets	100×100	25	**10600090**
Sheets	100×100	10	**10600091**
Sheets	200×200	10	**10600060**
Sheets	254×600	5	**10600040**

Blotting membranes, Amersham™ Hybond™ SEQ 0.2 PVDF
GE Healthcare

Amersham™ Hybond™ SEQ 0.2 PVDF is a 0,2 µm pore size hydrophobic membrane designed specifically for protein sequencing applications. The small pore size of this membrane minimises 'blow-through' and increases protein binding over a wide range of molecular weights.

- Efficient capture of proteins during transfer minimises sample loss
- High protein retention even after harsh washing steps
- 0,2 µm pore size for higher surface area, resulting in better binding of low molecular weight proteins
- Protein binding capacity over 200 µg/cm² for easy signal detection
- Available in popular precut sizes
- Chemical resistance needed for N-terminal sequencing

Description	Dimensions (mm)	Pk	Cat. No.
Roll	260 mm × 4 m	1	**10600030**
Sheets	100×100	10	**10600092**
Sheets	200×200	10	**10600061**

Blotting membranes, nitrocellulose, Amersham™ Protran®

GE Healthcare

Amersham™ Protran® membranes are manufactured from 100% pure nitrocellulose to ensure the highest binding capacity possible. They are compatible with a variety of detection methods, including isotopic, chemiluminescent, colorimetric and fluorescent. No methanol pre-wetting step is required, making this the membrane of choice for proteins which prefer aqueous environments. Prior to transfer the membrane is simply wetted with water, and then placed in the transfer buffer. No other pretreatment steps are necessary.

Available in a choice of pore sizes: Protran® 0.1 NC (pore size 0,1 µm), Protran® 0.2 NC (pore size 0,2 µm), or Protran® 0.45 NC (pore size 0,45 µm). The versatile Protran® 0.1 NC membrane (binding capacity 231 to 248 µg IgG/cm^2) provides excellent binding affinity for small proteins and peptides, as well as nucleic acids; Protran® 0.2 NC (binding capacity 150 to 176 µg IgG/cm^2) binds small proteins (< Mr 20 000); and Protran® 0.45 NC (binding capacity 162 to 180 µg IgG/cm^2) is suitable for proteins of a wide range of molecular weights.

- Proprietary nitrocellulose formula gives a long shelf life of bound proteins
- High binding capacity
- Low background and excellent signal-to-noise ratios
- Compatible with a variety of labelling and detection systems
- Available in popular precut sizes

For convenience, Western blotting sandwiches (10 sandwiches/package) are also available. Each sandwich consists of precut Amersham™ Protran® NC membranes preassembled with 2×3MM Chr filter papers.

Description	Dimensions (mm)	Pk	Cat. No.
Amersham™ Protran® 0.1 NC			
Sheets	80×90	25	**10600095**
Sheets	100×100	10	**10600077**
Sheets	100×100	25	**10600076**
Sheets	140×160	25	**10600064**
Sheets	200×200	10	**10600046**
Sheets	200×200	25	**10600045**
Sheets	300×600	5	**10600031**
Roll	150 mm × 4 m	1	**10600010**
Roll	200 mm × 4 m	1	**10600005**
Roll	300 mm × 4 m	1	**10600000**
Amersham™ Protran® 0.2 NC			
Sheets	80×90	25	**10600094**
Sheets	100×100	10	**10600075**
Sheets	100×100	25	**10600074**
Sheets	140×160	25	**10600063**
Sheets	200×200	10	**10600044**
Sheets	200×200	25	**10600043**
Sheets	300×600	5	**10600032**
Roll	150 mm × 4 m	1	**10600011**
Roll	200 mm × 4 m	1	**10600006**
Roll	300 mm × 4 m	1	**10600001**
Amersham™ Protran® 0.45 NC			
Sheets	80×90	25	**10600093**
Sheets	100×100	10	**10600073**
Sheets	100×100	25	**10600072**
Sheets	140×160	25	**10600062**
Sheets	200×200	10	**10600042**
Sheets	200×200	25	**10600041**
Sheets	300×600	5	**10600033**
Roll	150 mm × 4 m	1	**10600012**
Roll	200 mm × 4 m	1	**10600007**
Roll	300 mm × 4 m	1	**10600002**
Amersham™ Protran® sandwiches			
Sandwich, Protran® 0.1 NC/3MM Chr	80×90	10	**10600116**
Sandwich, Protran® 0.2 NC/3MM Chr	80×90	10	**10600115**
Sandwich, Protran® 0.45 NC/3MM Chr	80×90	10	**10600114**
Sandwich, Protran® 0.1 NC/3MM Chr	140×160	10	**10600105**
Sandwich, Protran® 0.2 NC/3MM Chr	140×160	10	**10600104**
Sandwich, Protran® 0.45 NC/3MM Chr	140×160	10	**10600103**

Blotting membranes, nitrocellulose, Amersham™ Protran® Premium
GE Healthcare

Amersham™ Protran® Premium nitrocellulose blotting membranes provide excellent sensitivity, resolution and low background in fluorescence Western blotting detection applications.

Available with a choice of pore size: Protran® Premium 0.2 NC (with pore size 0,2 µm, binding capacity 173 to 203 µg IgG/cm²), or Protran® Premium 0.45 NC (with pore size 0,45 µm, binding capacity 162 to 180 µg IgG/cm²).

- Available in popular precut sizes
- High binding capacity
- Protran® Premium 0.2 NC offers low auto-fluorescence across a wide range of excitation/emission wavelengths, making the membrane suitable for fluorescence-based immunodetection and multiplexing

For convenience, Western blotting sandwiches (10 sandwiches/package) are also available. Each sandwich consists of precut Amersham™ Protran® Premium NC membranes preassembled with 2×3MM Chr filter papers.

Description	Dimensions (mm)	Pk	Cat. No.
Amersham™ Protran® Premium 0.2 NC			
Sheets	80×90	25	**10600097**
Sheets	100×100	10	**10600081**
Sheets	100×100	25	**10600080**
Sheets	140×160	25	**10600066**
Sheets	200×200	10	**10600050**
Sheets	200×200	25	**10600049**
Sheets	300×600	5	**10600035**
Roll	150 mm × 4 m	1	**10600014**
Roll	200 mm × 4 m	1	**10600009**
Roll	300 mm × 4 m	1	**10600004**
Amersham™ Protran® Premium 0.45 NC			
Sheets	80×90	25	**10600096**
Sheets	100×100	10	**10600079**
Sheets	100×100	25	**10600078**
Sheets	140×160	25	**10600065**
Sheets	200×200	10	**10600048**
Sheets	200×200	25	**10600047**
Sheets	300×600	5	**10600034**
Roll	150 mm × 4 m	1	**10600013**
Roll	200 mm × 4 m	1	**10600008**
Roll	300 mm × 4 m	1	**10600003**
Amersham™ Protran® Premium sandwiches			
Sandwich, Protran® Premium 0.45 NC/3MM Chr	80×90	10	**10600117**
Sandwich, Protran® Premium 0.2 NC/3MM Chr	80×90	10	**10600118**
Sandwich, Protran® Premium 0.45 NC/3MM Chr	140×160	10	**10600106**
Sandwich, Protran® Premium 0.2 NC/3MM Chr	140×160	10	**10600107**

Blotting membranes, nitrocellulose, Amersham™ Protran® Supported
GE Healthcare

Amersham™ Protran® Supported is a robust protein blotting membrane, with 0,2 µm pore size, made of reinforced nitrocellulose for multiple reprobings.

Available with a choice of pore size: Protran® Supported 0.2 NC (pore size 0,2 µm, binding capacity 120 to 150 µg IgG/cm²) or Protran® Supported 0.45 NC (pore size 0,45 µm, binding capacity 60 to 80 µg IgG/cm²).

- Optimal for applications when stripping and reprobing is required
- Recommended for detection of small proteins and peptides (< Mr 20 000)
- Versatile, robust, and excellent signal-to-noise ratios
- High binding capacity
- 0,45 µm membrane suitable for proteins of a wide range of molecular weights

For convenience, Western blotting sandwiches (10 sandwiches/package) are also available. Each sandwich consists of precut Amersham™ Protran® Supported NC membranes preassembled with 2×3MM Chr filter papers.

Description	Dimensions (mm)	Pk	Cat. No.
Amersham™ Protran® Supported 0.2 NC			
Sheets	80×90	25	**10600099**
Sheets	100×100	10	**10600085**
Sheets	100×100	25	**10600084**
Sheets	140×160	25	**10600068**

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Description	Dimensions (mm)	Pk	Cat. No.
Amersham™ Protran® Supported 0.2 NC			
Sheets	200×200	10	**10600054**
Sheets	200×200	25	**10600053**
Sheets	300×600	5	**10600037**
Roll	150 mm × 4 m	1	**10600019**
Roll	200 mm × 4 m	1	**10600017**
Roll	300 mm × 4 m	1	**10600015**
Amersham™ Protran® Supported 0.45 NC			
Sheets	80×90	25	**10600098**
Sheets	100×100	10	**10600083**
Sheets	100×100	25	**10600082**
Sheets	140×160	25	**10600067**
Sheets	200×200	10	**10600052**
Sheets	200×200	25	**10600051**
Sheets	300×600	5	**10600036**
Roll	150 mm × 4 m	1	**10600020**
Roll	200 mm × 4 m	1	**10600018**
Roll	300 mm × 4 m	1	**10600016**
Amersham™ Protran® Supported sandwiches			
Sandwich, Protran® Supported 0.45 NC/3MM Chr	80×90	10	**10600119**
Sandwich, Protran® Supported 0.2 NC/3MM Chr	80×90	10	**10600120**
Sandwich, Protran® Supported 0.45 NC/3MM Chr	140×160	10	**10600108**
Sandwich, Protran® Supported 0.2 NC/3MM Chr	140×160	10	**10600109**

VWR COLLECTION

SELECTED FOR YOU

Blotting paper, grade 703

Ideal for use as wicks in protein and nucleic acid blotting. Provides a uniform flow of buffer through the gel to the transfer membrane in a blotting sandwich. Also suitable for use in removing gels from glass supports.

- Made of 100% cotton fibre
- Uniform and smooth
- Produced using ultrapure water
- Contains no additives

Grade	Grade 703
Weight	185 g/m²
Thickness	0,38 mm
Herzberg flow rate	250 seconds per 100 ml at 10 cm head of water
Klemm wicking rate test	626 seconds per 7.5 cm rise

Description	Dimensions (mm)	Pk	Cat. No.
Sheets	70×100	100	**732-0596**
Sheets	100×150	100	**732-0605**
Sheets	140×160	100	**732-0603**
Sheets	150×150	100	**732-0607**
Sheets	200×200	100	**732-0593**
Sheets	460×570	100	**732-0591**

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Blotting pads, grade 707

This super-thick paper is used to complete the blotting sandwich. Smooth, uniform texture assures continuous contact of buffer from the chamber through the gel and transfer membrane to the opposite pole or weight.

- Made of 100% cotton fibre
- Produced using ultrapure water
- Contains no additives
- Cleaner and more consistent than paper towels

Weight	703 g/m²
Thickness	2,60 mm
Herzberg flow rate	120 seconds per 100 ml at 10 cm head of water
Klemm wicking rate test	96 seconds per 7.5 cm rise

Description	Dimensions (mm)	Pk	Cat. No.
Sheets	50×75	50	**732-0608**
Sheets	70×80	50	**732-0604**
Sheets	70×100	50	**732-0594**
Sheets	100×140	50	**732-0598**
Sheets	110×130	50	**732-0601**
Sheets	110×140	50	**732-0595**
Sheets	110×180	50	**732-0600**
Sheets	130×200	50	**732-0602**
Sheets	140×160	50	**732-0599**
Sheets	140×200	50	**732-0597**
Sheets	160×180	50	**732-0606**
Sheets	200×200	50	**732-0592**

Blotting paper, Amersham™ Hybond™

GE Healthcare

Research laboratory blotting paper for use in gel electrophoresis in all molecular biology and protein studies applications.

- Recommended for use with all Hybond™ blotting membranes
- High purity and uniformity ensures consistent and reproducible results
- Pure Cellulose Grade, 0,39 mm thick paper with medium wet strength and smooth surface

Description	Dimensions (mm)	Pk	Cat. No.
Sheets	200×200	100	**RPN6101M**

Gel blotting sheets, GB003

Whatman (GE Healthcare)

This general purpose blotting paper is made from pure raw materials with a high absorbency and is used as a membrane gel support. Due to its thickness (0,8 mm), it is recommended for the lysis/denaturation of colony or plaque lifts and Western blots.

Description	Dimensions (mm)	Pk	Cat. No.
Sheets	100×100	50	**732-4091**
Sheets	150×150	100	**732-2531**
Sheets	150×200	100	**732-4229**
Sheets	160×180	100	**732-4230**
Sheets	200×200	100	**732-4098**
Sheets	300×600	25	**732-4092**
Sheets	460×570	100	**732-4100**
Sheets	580×600	50	**732-4093**

Gel blotting sheets, GB005

Whatman (GE Healthcare)

This thick (1.2 mm) highly absorbent paper is recommended for applications where fewer layers of blotting paper must still ensure a high capacity. Particularly recommended for semi-dry blotting of proteins.

Description	Dimensions (mm)	Pk	Cat. No.
Sheets	150×150	25	**732-4215**
Sheets	200×200	25	**732-4216**
Sheets	580×580	25	**732-4094**

PALL Life Sciences

Transfer membranes, Biodyne®

Biodyne® Transfer Membranes offer high sensitivity and low background for enhanced detection and resolution. They are ideal for nucleic acid detection.

Biodyne® A Membrane (Amphoteric Nylon 6.6): Membrane zeta potential can be modulated by changes in pH. Ideal for single probe or multiple rehybridisations, and applications where background is troublesome.

Biodyne® B Membrane (Positively-charged Nylon 6.6): Pore surfaces are populated by a high density of quaternary ammonium groups. Highest sensitivity for nucleic acid applications.

Biodyne® C Membrane (Negatively-charged Nylon 6.6): Can be derivatised by coupling reactions through the carboxyl groups on the pore surfaces.

Biodyne® Plus Membrane (Positively-charged Nylon 6.6 with high isoelectric point): With certain non-radioactive detection systems, it is more sensitive than Biodyne® A membrane while exhibiting lower background than Biodyne® B membrane. Especially suitable for reverse dot blots and ELISA applications.

- Membranes do not crack, shrink, or tear when subjected to multiple cycles of hybridisation, stripping and reprobing
- Intrinsically hydrophilic for easy wetting
- Superior performance with radioactive (Biodyne® B membrane) and non-radioactive (Biodyne® A membrane) detection systems

Biodyne® Transfer Membranes are resistant to common solvents such as acetone, alcohol, chlorinated aliphatic hydrocarbons, formamide, 2 M sodium hydroxide, DMSO, and dimethylformamide. They are not compatible with concentrated formic acid (>50%), hydrochloric acid (>4 M), oxidising agents, and long exposures (days to weeks) to pH <2.

Description	Dimensions (mm)	Pk	Cat. No.
Biodyne® A, pore size 0.2 µm			
Roll	300×3000	1 Roll	**732-3008**
Biodyne® A, pore size 0.45 µm			
Discs	Ø 82	50	**732-3002**
Discs	Ø 137	50	**732-3005**
Roll	200×3000	1 Roll	**732-3009**
Roll	300×3000	1 Roll	**732-3006**
Biodyne® A, pore size 1.2 µm			
Roll	300×3000	1 Roll	**732-3007**
Biodyne® B, pore size 0.45 µm			
Discs	Ø 85	50	**732-3013**
Discs	Ø 137	50	**732-3015**
Roll	200×1000	1	**732-3045**
Roll	200×3000	1 Roll	**732-3017**
Roll	300×3000	1 Roll	**732-3016**
Sheets	70×85	10	**732-3011**
Sheets	200×200	10	**732-3010**
Biodyne® C, pore size 0.45 µm			
Discs	Ø 82	50	**516-7763**
Discs	Ø 85	50	**732-3020**
Discs	Ø 132	50	**732-3021**
Discs	Ø 137	50	**732-3022**
Sheets	70×85	10	**732-3019**
Sheets	200×200	10	**732-3018**
Biodyne® Plus, pore size 0.45 µm			
Discs	Ø 82	50	**732-3026**
Discs	Ø 85	50	**732-3027**
Discs	Ø 132	50	**732-3028**
Sheets	200×200	10	**732-3024**
Roll	300×3000	1 Roll	**732-3030**

PALL Life Sciences

Transfer membranes, BioTrace™ NT

Pure unsupported nitrocellulose membrane ideally suited for colony and plaque lifts and protein transfers.

- Strong and durable, less likely to tear or crack
- High binding capacity for proteins and nucleic acids
- Low protein burn-through in electrophoretic transfers

Pore size: 0,2 µm

Typical thickness: 145 µm

Protein binding capacity: 209 µg/cm^2

Description	Dimensions (mm)	Pk	Cat. No.
Discs	Ø 82	50	**732-3033**
Discs	Ø 85	50	**516-7945**
Discs	Ø 132	50	**732-3036**

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Description	Dimensions (mm)	Pk	Cat. No.
Sheets	70×85	10	**516-9022**
Sheets	200×200	10	**732-3035**
Sheets	300×500	5	**732-3032**
Roll	300 mm × 3 m	1 Roll	**732-3031**

PALL Life Sciences

Transfer membranes, FluoroTrans® PVDF

Naturally hydrophobic PVDF, ideal for a wide variety of protein-analysis applications. The family of FluroTrans® media are white, microporous solid phase supports that bind proteins tenaciously via hydrophobic interactions. FluoroTrans® membrane is optimised for N-terminal protein sequencing. FluoroTrans® W membrane is optimised for Western transfer applications. FluoroTrans® W membrane allows for sensitive protein detection with low background and very low protein burn-through. Immobilised proteins can be visually detected with Coomassie® Blue, Amido Black, Ponceau S, and colloidal gold.

- High protein binding capacity - typically absorbs 50% more protein than nylon or nitrocellulose
- High tensile strength, so won't tear, crack or curl during handling, allowing easy removal of target bands for protein sequencing applications
- High sensitivity for small peptides

Pore size: 0,2 µm

Typical thickness: 127 µm

Description	Dimensions (mm)	Pk	Cat. No.
FluoroTrans® membrane			
Sheets	70×84	10	**516-0219**
Sheets	85×90	20	**516-0220**
Sheets	130×140	1 Roll	**516-0222**
Sheets	200×200	10	**516-7498**
FluoroTrans® W membrane			
Sheets	100×150	10	**516-0225**
Sheets	200×200	10	**516-0226**
Rolls	300×3300	1 Roll	**516-0249**

PALL Life Sciences

Solid phase support membranes, Immunodyne® ABC membrane

Immunodyne® ABC membrane is a versatile, solid phase support for covalent attachment. Applications include oligonucleotide arrays, immersion or flow-through dot immunoassays, gene probe tests, wet and dry chemistry enzymatic tests, protein arrays, diagnostics, and can also be used in biosensor applications.

- Covalent binding activity for stable ligand immobilisation
- Greater binding capacity for proteins than traditional non-porous solid phase surfaces
- Consistent flow and diffusion characteristics for assay reproducibility
- Intrinsically hydrophilic for rapid wetting
- White membrane for excellent colour discrimination

Description	Dimensions	Pk	Cat. No.
Immunodyne® ABC membrane, 0,45 µm pore size	300 mm × 1,5 m	1	**731-2200**

Blotting membranes, Amersham™ Hybond™-N+
GE Healthcare

Amersham™ Hybond™-N+ is a positively charged nylon membrane with a binding capacity for nucleic acids up to 600 µg/cm² recommended for use with radioactive or non radioactive chemiluminescence and chemifluorescence detection systems. Amersham™ Hybond™-N+ yields excellent sensitivity in conventional Southern blotting. Nucleic acid samples may be fixed by UV exposure or baking, although UV fixation is best for maximum reproducibility. Amersham™ Hybond™-N+ is not suitable for alkali blotting and fixation.

- Recommended for all high density membrane arrays
- Multiple reprobing is possible without loss of membrane integrity
- QC tested in genomic Southern blots

Pore size: 0,45 µm
Nucleic acid size required: >50 bp

Description	Dimensions (mm)	Pk	Cat. No.
Discs	Ø 82	50	**RPN82B**
Discs, with grid	Ø 82	50	**RPN1782B**
Discs	Ø 87	50	**RPN87B**
Discs	Ø 132	50	**RPN132B**
Discs, with grid	Ø 132	50	**RPN1732B**
Discs	Ø 137	50	**RPN137B**
Sheets	119×78	50	**RPN119B**
Sheets	120×100	20	**RPN1210B**
Sheets	150×200	10	**RPN1520B**
Sheets	200×200	10	**RPN2020B**
Sheets	222×222	10	**RPN2222B**
Sheets*	222×222	50	**RPN2250B**
Sheets	225×225	50	**RPN225B**
Sheets	300×500	5	**RPN3050B**
Roll	200 mm × 3 m	1 Roll	**RPN203B**
Roll	300 mm × 3 m	1 Roll	**RPN303B**

*designed to fit Nunc™ OmniTray

Blotting membranes, Amersham™ Hybond™-N
GE Healthcare

Amersham™ Hybond™-N is a neutral nylon membrane with a binding capacity for nucleic acids up to 600 µg/cm² recommended for use in radioactive applications (for example, Southern and Northern blots). Amersham™ Hybond™-N is a strong, supported membrane that is inherently hydrophilic and requires no pre-wetting. Nucleic acids can be quickly and easily crosslinked to nylon using UV light. When using low buffer volumes Hybond™-NX is recommended.

- Designed for use in radioactive applications

Pore size: 0,45 µm
Nucleic acid size required: >50 bp

Description	Dimensions (mm)	Pk	Cat. No.
Discs	Ø 82	50	**RPN82N**
Discs	Ø 87	50	**RPN87N**
Discs	Ø 132	50	**RPN132N**
Discs	Ø 132	50	**RPN137N**
Sheets	150×200	10	**RPN1520N**
Sheets	200×200	10	**RPN2020N**
Sheets	300×500	5	**RPN3050N**
Roll	200 mm × 3 m	1 Roll	**RPN203N**
Roll	300 mm × 3 m	1 Roll	**RPN303N**

Blotting membranes, Amersham™ Hybond™-XL
GE Healthcare

Amersham™ Hybond™-XL is a positively charged nylon membrane which is designed to give optimum signal-to-noise ratios when used with radioactively labelled probes. Amersham™ Hybond™-XL has a greater concentration and a more even distribution of positive charge than other charged nylon membranes. It retains all the features of other nylon membranes, including high binding capacity up to 600 µg/cm^2, efficient binding of small fragments, effective probe removal and exceptional properties for reprobing.

- Designed to give optimum signal-to-noise ratios when used with radioactively labelled probes

Pore size: 0,45 µm
Nucleic acid size required: >50 bp

Description	Dimensions (mm)	Pk	Cat. No.
Discs	Ø 82	50	**RPN82S**
Sheets	119×78	50	**RPN119S**
Sheets	150×100	20	**RPN1510S**
Sheets	150×200	10	**RPN1520S**
Sheets	200×200	10	**RPN2020S**
Sheets	222×222	10	**RPN2222S**
Roll	200 mm × 3 m	1 Roll	**RPN203S**
Roll	300 mm × 3 m	1 Roll	**RPN303S**

Blotting membranes, Amersham™ Hybond™-NX
GE Healthcare

Amersham™ Hybond™-NX is a neutral nylon membrane with all the properties of Hybond™-N. It can be used for multiple re-probing due to its high tensile strength. Hybond™-NX gives cleaner backgrounds than Hybond™-N when using hybridisation buffer volumes below 70 µl/cm^2 of membrane.

- Developed specifically for use with low hybridisation buffer volumes and high-throughput applications

Pore size: 0,45 µm
Nucleic acid size required: >50 bp

Description	Dimensions	Pk	Cat. No.
Roll	200 mm × 3 m	1 Roll	**RPN203T**
Roll	300 mm × 3 m	1 Roll	**RPN303T**

Blotting membranes, Amersham™ Hybond™ ECL™
GE Healthcare

Hybond™ ECL™ gives excellent sensitivity, resolution, and low background for all labelling and detection systems (radioactive, non radioactive, and chromogenic), especially when used with ECL™, ECL™ Prime, and ECL™ Plex Western Blotting Detection kits and reagents. Special packaging features include interleaf on both sides of the membrane and air-tight resealable aluminium bag with label space for marking the "opened on" date.

- 100% pure nitrocellulose membrane validated for use with all ECL™ Western blotting systems and for all protein blotting applications
- Special packaging features enhance membrane performance in terms of handling and consistency of results

Pore size: 0,45 µm
Minimal protein size required: 7 kDa

Description	Dimensions (mm)	Pk	Cat. No.
Discs	Ø 82	50	**RPN82D**
Discs	Ø 132	50	**RPN132D**

Blotting membranes, nitrocellulose, Optitran®
Whatman (GE Healthcare)

Optitran® membranes consist of 100% nitrocellulose, which is cast onto both sides of an inert polyester support material. The support in no way affects transfer conditions or results and gives the membrane exceptional handling characteristics, allowing it to be re-probed repeatedly.

- Combines high sensitivity with low non-specific binding
- Using standard nitrocellulose protocols, stringent washing and blocking conditions are not necessary
- Combination of flexibility, strength and excellent signal-to-noise ratio make them ideal for experiments involving repeated stripping and re-probing

Optitran® binding capacity: 75 - 90 µg/cm²

Description	Dimensions (mm)	Pk	Cat. No.
Optitran® BA-S 85, pore size 0,45 µm			
Discs	Ø 82	50	**732-4245**
Discs	Ø 132	50	**732-4246**

Blotting membranes, nitrocellulose, Protran®
Whatman (GE Healthcare)

Protran® membranes are manufactured from 100% pure nitrocellulose to ensure the highest binding capacity possible. They are compatible with a variety of detection methods, including isotopic, chemiluminescent, colorimetric and fluorescent. No methanol pre-wetting step is required, making this the membrane of choice for proteins which prefer aqueous environments. Prior to transfer the membrane is simply wetted with water, and then placed in the transfer buffer. No other pre treatment steps are necessary.

- High binding, low background, without the need for stringent washing conditions
- Proteins maintain molecular recognition activity for many years

The 0,2 µm pore size membrane (Protran® BA83) ensures high retention of small proteins below 20 kD by reducing 'blow-through' and the 0,45 µm pore size membrane (Protran® BA85) is ideal for larger molecular weights.

Protran® binding capacity: 80 - 150 µg/cm²

Description	Dimensions (mm)	Pk	Cat. No.
Protran® BA83, pore size 0,2 µm			
Discs	Ø 82	50	**732-4012**
Protran® BA85, pore size 0,45 µm			
Discs	Ø 25	100	**732-4168**
Discs	Ø 25	1.000	**732-0347**
Discs	Ø 82	50	**732-4000**
Discs, with 5 mm grid	Ø 82	50	**732-4019**
Discs	Ø 82,5	50	**732-0348**
Discs	Ø 87	50	**732-4003**
Discs	Ø 132	25	**732-4001**
Discs	Ø 132	50	**732-4169**
Discs	Ø 137	25	**732-4002**
Discs	Ø 137	50	**732-4170**

Western blotting system, Amersham™ ECL™
GE Healthcare

ECL™ Western blotting system uses horseradish peroxidase (HRP) conjugated anti-mouse and anti-rabbit antibodies for luminol-based detection of Western blots. Blots probed with mouse or rabbit primary antibodies are incubated with HRP-conjugated secondary antibodies. Addition of ECL™ detection reagents results in a chemiluminescent signal that can be captured on film or detected with a CCD camera. ECL™ Western blotting system is optimised to provide rapid, sensitive results using simple protocols and is designed for use with nitrocellulose and PVDF membranes.

- Up to 10 times more sensitive than colorimetric methods
- Results can be rapidly obtained on X-ray film, providing hard copy data and avoiding fading associated with colorimetric detection methods
- Save time and materials by reprobing on membranes up to 10 times
- Non-radioactive - no specialised facilities needed

Delivery information: Each kit contains sufficient reagents for detection of 1000 cm² membrane: anti-mouse HRP conjugate, 100 µl; anti-rabbit HRP conjugate, 100 µl; ECL™ detection reagents 1 and 2, 62.5 ml each; blocking agent, 5 g.

Description	Pk	Cat. No.
Amersham™ ECL™ Western blotting system	1 KIT	**RPN2108**

Western blotting detection reagents, Amersham™ ECL™
GE Healthcare

Amersham™ ECL™ Western blotting detection reagents are at least 10-fold more sensitive than colorimetric assays and produce excellent and reliable results. These reagents use enhanced luminol-based detection, which is suitable for all routine Western blotting. ECL™ Western blotting detection reagents in combination with Hybond™ ECL™ membranes form a complete solution for Western blot applications.

- High sensitivity, ~10 pg in model system
- Proven performance, frequently cited in publications
- Detectable on Hyperfilm™ ECL™ or with CCD imager

Description	Pk	Cat. No.
Kit containing 62.5 ml each of ECL™ detection reagents 1 and 2, for 1000 cm^2 membrane	1	**RPN2109**
Kit containing 125 ml each of ECL™ detection reagents 1 and 2, for 2000 cm^2 membrane	1	**RPN2209**
Kit containing 250 ml each of ECL™ detection reagents 1 and 2, for 4000 cm^2 membrane	1	**RPN2106**
Kit containing 375 ml each of ECL™ detection reagents 1 and 2, for 6000 cm^2 membrane	1	**RPN2134**

Western blotting combination packs, Amersham™ ECL Plex™
GE Healthcare

Amersham™ ECL Plex™ Western blotting combination packs offer a complete system for fluorescent Western blotting, with improved formulation Cy3 conjugates for lower background.

Delivery information: Each pack includes sufficient reagents for at least 1000 cm^2 of membrane: ECL Plex™ goat-α-mouse IgG-Cy3, 150 µg; ECL Plex™ goat-α-rabbit IgG-Cy5, 150 µg; ECL Plex™ fluorescent Rainbow™ markers, 120 µl; Hybond ECL™, 10×10 cm, 10 sheets or Hybond™-LFP, 20×20 cm, 3 sheets.

Description	Pk	Cat. No.
ECL Plex™ Western blotting combination pack (Cy3, Cy5, Hybond™-LFP)	1 KIT	**RPN999**
ECL Plex™ goat-α-rabbit IgG-Cy3, recommended for 1000 cm^2 membrane	150 µG	**28-9011-06**
ECL Plex™ goat-α-mouse IgG-Cy2, recommended for 1000 cm^2 membrane	150 µG	**28-9011-08**
ECL Plex™ goat-α-mouse IgG-Cy2, recommended for 4000 cm^2 membrane	600 µG	**28-9011-09**
ECL Plex™ goat-α-rabbit IgG-Cy2, recommended for 1000 cm^2 membrane	150 µG	**28-9011-10**
ECL Plex™ goat-α-mouse IgG-Cy3, recommended for 1000 cm^2 membrane	150 µG	**PA43009**
ECL Plex™ goat-α-mouse IgG-Cy5, recommended for 1000 cm^2 membrane	150 µG	**PA45009**
ECL Plex™ goat-α-rabbit IgG-Cy5, recommended for 1000 cm^2 membrane	150 µG	**PA45011**

Western blotting blocking reagent, Amersham™ ECL™
GE Healthcare

For blocking nitrocellulose and PVDF membranes to be used with ECL™ Western blotting detection reagents.

Delivery information: Each pack contains 40 g of membrane blocking agent, sufficient for at least 20 miniblots.

Description	Pk	Cat. No.
Amersham ECL™ blocking agent	1	**RPN2125**

Western blotting reagent pack, Amersham™ ECL™
GE Healthcare

Amersham™ ECL™ Western blotting reagent pack contains reagents for membrane blocking and secondary detection of membrane-bound mouse and rabbit primary antibodies. It is designed for use with nitrocellulose or PVDF membranes. The system is optimised for use with Amersham™ ECL™ detection reagents (not included).

Delivery information: Each pack contains sufficient reagents for at least 10 miniblots: Anti-mouse IgG horseradish peroxidase conjugate, 100 µl; Anti-rabbit IgG horseradish peroxidase conjugate, 100 µl; ECL™ membrane blocking agent, 5 g.

Description	Pk	Cat. No.
Amersham ECL™ Western blotting reagent pack	1	**RPN2124**

Western blotting detection reagent, Amersham™ ECL Select™
GE Healthcare

Amersham™ ECL Select™ is a high sensitivity reagent for chemiluminescent Western blotting detection. High signal intensity makes Amersham™ ECL Select™ suitable for the most demanding Western blotting applications, allowing for detection of minute protein quantities. Its long lasting signals allow for multiple exposures and a convenient time window between experiment and analysis. Signals can be detected with CCD camera or X-ray film.

- Produces a very high signal intensity
- Linear dynamic range allowing for quantitation of medium to very low abundant proteins
- Works with a wide range of antibody dilutions, reducing the need for lengthy optimisation

Description	Pk	Cat. No.
Amersham™ ECL Select™ Western blotting detection reagent for 1000 cm^2 membrane	1 KIT	**RPN2235**

Western blotting detection reagent, Amersham™ ECL™ Prime
GE Healthcare

Amersham™ ECL™ Prime is a highly sensitive Western blotting detection reagent characterised by stable signal emission, allowing for the possibility of repeated exposures and making it easier to process several blots in the same experimental run. Amersham™ ECL™ Prime delivers a detection system that is sensitive, stable, precisely quantitative across a wide dynamic range of protein levels, and conservative in its consumption of expensive antibody reagents. The high performance of Amersham™ ECL™ Prime is due to the presence of an enhancer in the reagent, increasing enzyme turnover, and thereby significantly increasing both signal intensity and duration. The light signal is further intensified by the addition of a catalyst.

- High signal intensity and sensitivity allows the use of highly diluted primary and secondary antibodies with no reduction in sensitivity
- Stable signal allows multiple exposures and makes the reagent suitable for large experimental series, allowing convenient handling time between the end of the experiment and detection
- Compatible with Rainbow™ molecular weight markers and Amersham™ ECL™ DualVue™ Western blotting markers
- Optimised for use with Amersham™ Hybond™ P (PVDF) membranes and compatible with Amersham™ Hybond™-ECL™ (nitrocellulose) membranes

Delivery information: Includes Solution A (luminol solution, 50 ml) and Solution B (peroxide solution, 50 ml), sufficient for 1000 cm^2 membrane.

Description	Pk	Cat. No.
Amersham™ ECL™ Prime Western blotting detection reagent, for 1000 cm^2 membrane	1 KIT	**RPN2232**

HRP-linked secondary antibodies, Amersham™ ECL™
GE Healthcare

Horseradish peroxidase conjugated antibodies supplied in phosphate buffered saline (sodium phosphate 0,1 M, NaCl 0,1 M) pH 7,5, containing 1% (w/v) bovine serum albumin and an antimicrobial agent.

- Highly species specific
- Optimised for use with the range of ECL detection reagents
- Recommended dilutions to minimise background

Description	Pk	Cat. No.
ECL mouse IgG, HRP-linked $F(ab')_2$ fragment (from sheep)	1 ml	**NA9310-1ML**
ECL mouse IgG, HRP-linked whole Ab (from sheep)	100 µl	**NA931-100UL**
ECL mouse IgG, HRP-linked whole Ab (from sheep)	1 ml	**NA931-1ML**
ECL human IgG, HRP-linked whole Ab (from sheep)	1 ml	**NA933-1ML**
ECL rabbit IgG, HRP-linked $F(ab')_2$ fragment (from donkey)	1 ml	**NA9340-1ML**
ECL rabbit IgG, HRP-linked whole Ab (from donkey)	100 µl	**NA934-100UL**
ECL rabbit IgG, HRP-linked whole Ab (from donkey)	1 ml	**NA934-1ML**
ECL rat IgG, HRP-linked whole antibody (from goat)	1 ml	**NA935**
ECL mouse IgG, HRP-linked whole Ab (from sheep)	1 ml	**NXA931-1ML**

Rapid Western Blotting kits

Rapid Western Blotting kits streamline each step of Western blotting, enabling the entire procedure from the transfer step through development to be completed in less that an hour and a half. These versatile kits include all reagents except for user-supplied primary antibodies and are designed for use with standard transfer equipment. All reagents are protein-free formulations to minimise cross-reactivity and enhance antigen availability. Rapid Western Blotting Kits are offered with anti-mouse, anti-rabbit, anti-goat, or anti-rat secondary antibodies that are optimised to generate blots with low backgrounds and reduced blotches. The wet transfer and semi-dry versions of the kits, which differ only in the amount of transfer buffer included, are packaged with sufficient reagents to perform fifteen 10×10 cm blots. Rapid Western Blotting kits are compatible with both PVDF and nitrocellulose membranes and with staining with phospho-specific antibodies.

- Transfer to development in less than 90 minutes
- Rapid Transfer Buffer transfers proteins from gel to membrane in 10 to 20 minutes
- RapidBlock™ efficiently blocks the membrane in 5 minutes
- Rapid Blot Secondary HRP Antibody is conincubated with primary antibody to save time
- Rapid Wash Buffer for a single, 15 minute wash step

Description	Pk	Cat. No.
Rapid Western Blotting kits		
Anti-mouse semi-dry transfer kit	1 KIT	**N790-KIT**
Anti-rabbit semi-dry transfer kit	1 KIT	**N791-KIT**
Anti-mouse wet transfer kit	1 KIT	**N792-KIT**
Anti-rabbit wet transfer kit	1 KIT	**N793-KIT**
Anti-goat semi-dry transfer kit	1 KIT	**1B1322-KIT**
Anti-goat wet transfer kit	1 KIT	**1B1323-KIT**
Anti-rat semi-dry transfer kit	1 KIT	**1B1324-KIT**
Anti-rat wet transfer kit	1 KIT	**1B1325-KIT**

X-Ray Film Background Reducer kit, UnDo™

UnDo™ X-Ray Film Background Reducer kit easily and proportionally reduces the signal on overexposed film. The kit includes two solutions that are used sequentially to oxidise and remove silver deposits on the exposed x-ray films. First, the silver grains are oxidised on the film by Solution A and then Solution B is used to stop the oxidation reaction and dissolve the oxidised silver grains. A short wash in distilled water completes the reduction process, which may then be repeated as needed to achieve the desired results. The original data is preserved due to proportional removal of silver from low and high density areas on the film. The result is an optimised image that reduces ambiguous data interpretation and the need for repeating experiments in many instances.

Delivery information: Kit includes UnDo™ X-Ray Film Background Reducer Solution A, 1 l and UnDo™ X-Ray Film Background Reducer Solution B, 1 l.

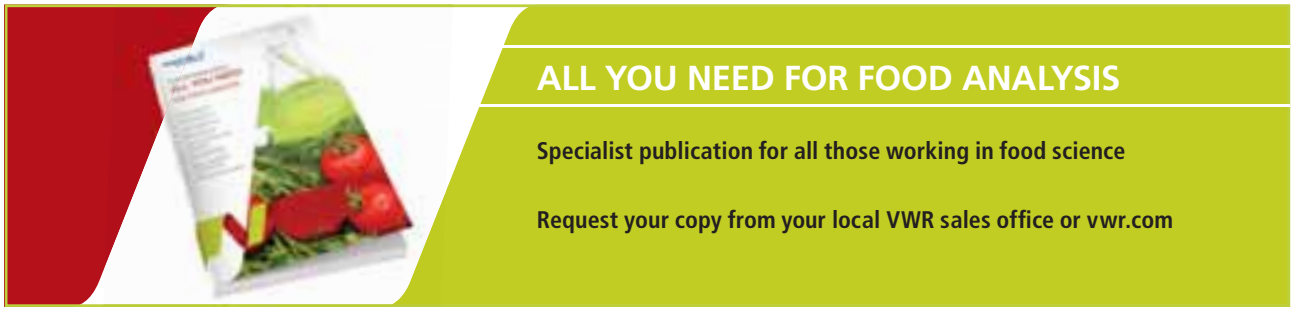
Description	Pk	Cat. No.
UnDo™ X-Ray Film Background Reducer kit	1 KIT	**N656-KIT**

PBS/Tween® buffer concentrate, 20X

PBS Tween® 20 blot wash buffer is a 20X concentration with 1% Tween® 20. When diluted down to a 1X concentration, 0,05% Tween® 20 is present. Concentrate (500 ml) prepares 10 litres of a 1X buffer.

- Prevents high background by efficiently removing unbound reagents
- Convenient liquid concentrate for blotting and ELISA applications

Description	Pk	Cat. No.
PBS/Tween®20 liquid concentrate, blot washer buffer, (20X), Ultra pure grade	500 ml	**K875-500ML**



Agarose 15, Electran®, for protein separation

Agarose 15 is ideal for serum protein electrophoresis and suitable for immunoelectrophoresis (IEP). May also be used for DNA electrophoresis. It has a medium range of electroendosmosis and high gel strength.

• DNase and RNase free

Description	Pk	Cat. No.
Agarose 15	25 g	443023R
Agarose 15	125 g	443024S
Agarose 15	500 g	443025T

Agarose 25, Electran®, for protein separation

Agarose 25 is suitable for use in a wide range of protein electrophoresis techniques and is particularly recommended for counter immunoelectrophoresis. In this application the higher electroendosmosis permits optimum positioning during antibody/antigen contact.

• DNase and RNase free

Description	Pk	Cat. No.
Agarose 25	25 g	442492P
Agarose 25	125 g	442494R

Agarose, DNA grade (100 bp-23 kb), Electran®

DNA grade agarose is suitable for the majority of routine DNA or RNA separations, but is ideal for separation of DNA fragments larger than 1000 bp. For applications where a more stringent specification is required DNA pure grade agarose is recommended.

• DNase and RNase free

Description	Pk	Cat. No.
Agarose, DNA grade (100 bp-23 kb), Electran®	100 g	438792U
Agarose, DNA grade (100 bp-23 kb), Electran®	1 kg	438795A

Agarose, wide range low melting (200 bp-25 kb), Electran®

Agarose, wide range low melting, is a low melting temperature agarose (≤65 °C). Confidently resolve fragments from 200 bp to 25 kb prior to PCR, cloning, digesting, or sequencing in the presence of re-melted agarose, without additional purification steps. Ideal resolution of DNA fragments >1000 bp.

Description	Pk	Cat. No.
Agarose, wide range low melting (200 bp-25 kb), Electran®	25 g	444152G
Agarose, wide range low melting (200 bp-25 kb), Electran®	125 g	444153H

Agarose, high resolution low melting (50 bp-1 kb), Electran®

Agarose high resolution (HR) has low melting and gelling temperatures but differs from traditional low melting point molecular biology grade agaroses in the gel separation range. Using this agarose in electrophoresis allows fine and consistent resolution of nucleic acids below 1000 base pairs, which differ by only a few base pairs. The properties of Agarose HR allow consistent gel separations (analytical and preparative) and performance of *in-vitro* translation and transcription mapping as well as *in-vivo* ligation and transformation. For analytical gel separation of DNA/RNA below 1000 base pairs where a higher gel strength for ease of manipulation is required, we recommend the use of Agarose, high resolution, Electran® (436552V/436553W).

• DNase and RNase free

Description	Pk	Cat. No.
Agarose high resolution, low melting Electran®	125 g	437123Y

Agarose, high resolution (50 bp-1 kb), Electran®

Agarose high resolution is optimised to give the exceptional separation on agarose of nucleic acid fragments below 1000 base pairs and differing by only a few base pairs. It retains the low gelling characteristics of the standard Agarose HR Plus with significantly increased gel strength at the expense of a higher melting temperature. This results in gels which are flexible and easy to handle. These properties make it the agarose of choice for analytical gel separations to check the quality and size of amplified fragments and for use in restriction mapping involving small digestion fragments.

- DNase and RNase free

Description	Pk	Cat. No.
Agarose, high resolution (50 bp-1 kb), Electran®	25 g	**436552V**
Agarose, high resolution (50 bp-1 kb), Electran®	100 g	**436553W**

Agarose I™

Agarose I™ is a standard melting/gelling agarose, suitable for routine nucleic acid analytical/preparative applications (250 bp - 22 kb). Agarose I™ has a low EEO for shorter electrophoretic runs without compromising resolution. Agarose I™ is excellent for blotting techniques and general manipulations.

- All-purpose, high purity agarose
- Exceptional band resolution and clarity
- Nuclease and protease-free
- Convenient tablet format available - no weighing required

Description	Pk	Cat. No.
Agarose I™	25 g	**0710-25G**
Agarose I™	100 g	**0710-100G**
Agarose I™	250 g	**0710-250G**
Agarose I™	500 g	**0710-500G**
Agarose I™ tablets, 500 mg	100 Tab.	**K857-100TABS**

Agarose 3:1 HRB™

Agarose 3:1 HRB™ (High Resolution Blend) is a mixture of agarose formulated to provide high resolution of small nucleic acids and PCR products. This product is specially designed for analysis of DNA fragments less than 1000 bp. Agarose 3:1 HRB™ displays precise banding patterns without smearing or high background fluorescence. The high gel strength allows for easy to handle gels that are optimal for blotting applications.

- High resolution blend
- Optimal for small nucleic acid fragments and PCR products
- Easy to handle due to high gel strength
- Nuclease and protease-free

Description	Pk	Cat. No.
Agarose 3:1 HRB™	25 g	**E776-25G**
Agarose 3:1 HRB™	100 g	**E776-100G**
Agarose 3:1 HRB™	250 g	**E776-250G**

Acrylamide-bis, ready-to-use solution 40% (19:1) for electrophoresis

Ready-to-use aqueous 40% w/v solution from acrylamide and N,N'-methylenebisacrylamide (5%C) in the ratio 19:1.

Description	Pk	Cat. No.
Acrylamide-Bis-solution (19:1)	1 l	**1.00640.1000**

For full specifications see VWR Merck Chemicals and Reagents Catalogue.

Acrylamide-bis, ready-to-use solution 40% (29.1:0.9) for electrophoresis

Ready-to-use aqueous 40% w/v solution from acrylamide and N,N'-methylenebisacrylamide (3%C) in the ratio 29.1:0.9.

Description	Pk	Cat. No.
Acrylamide-Bis-solution (29.1:0.9)	1 l	**1.00641.1000**

For full specifications see VWR Merck Chemicals and Reagents Catalogue.

Acrylamide-bis, ready-to-use solution 40% (37.5:1) for electrophoresis

Ready-to-use aqueous 40% w/v solution from acrylamide and N,N'-methylenebisacrylamide (3%C) in the ratio 37:1.

Description	Pk	Cat. No.
Acrylamide-Bis-solution (37.5:1)	1 l	**1.00638.1000**

For full specifications see VWR Merck Chemicals and Reagents Catalogue.

Acrylamide-bis, ready-to-use solution 30% (37.5:1) for electrophoresis

Ready-to-use solution for the preparation of polyacrylamide gels.

Description	Pk	Cat. No.
Acrylamide-bis, ready-to-use solution 30% (37,5:1)	1 l	**1.00639.1000**

For full specifications see VWR Merck Chemicals and Reagents Catalogue.

Acrylamide solutions, NEXT GEL®

Premixed, ready to pour acrylamide solution and 20X running buffer for the SDS PAGE analysis of proteins.

- Ready-to-pour SDS polyacrylamide solutions - just add APS and TEMED
- Faster gel casting with no stacking gel required
- Broad range of separation - 3,5 kDa to 212 kDa on the same gel
- High resolution of protein bands

Description	Pk	Cat. No.
NEXT GEL® 5% acrylamide solution	100 ml	**M254-100ML**
NEXT GEL® 5% acrylamide solution	500 ml	**M254-500ML**
NEXT GEL® 7,5% acrylamide solution	100 ml	**M255-100ML**
NEXT GEL® 7,5% acrylamide solution	500 ml	**M255-500ML**
NEXT GEL® 10% acrylamide solution	100 ml	**M256-100ML**
NEXT GEL® 10% acrylamide solution	500 ml	**M256-500ML**
NEXT GEL® 12,5% acrylamide solution	100 ml	**M257-100ML**
NEXT GEL® 12,5% acrylamide solution	500 ml	**M257-500ML**
NEXT GEL® 15% acrylamide solution	100 ml	**M258-100ML**
NEXT GEL® 15% acrylamide solution	500 ml	**M258-500ML**

Acrylamide

AppliChem

Three different grades of ready-to-use acrylamide solution are listed.

Acrylamide 4K is a four-times crystallised, very high purity grade material with a low conductivity, suitable for all electrophoresis applications. Acrylamide molecular biology grade is tested for the absence of DNases and RNases.
Storage: Room temperature in tightly closed bottles.

Description	Pk	Cat. No.
Acrylamide 4K solution (40%)	1 l	**A0962.1000**
Acrylamide solution (40%), molecular biology grade	1 l	**A3632.1000**
Acrylamide 4K:Bisacrylamide solution (40%), mix 37.5:1	500 ml	**A1577.0500**
Acrylamide 4K:Bisacrylamide solution (40%), mix 37.5:1	1 l	**A1577.1000**
Acrylamide:Bisacrylamide solution (40%), mix 37.5:1, molecular biology grade	500 ml	**A4989.0500**
Acrylamide:Bisacrylamide solution (40%), mix 37.5:1, molecular biology grade	1 l	**A4989.1000**
Acrylamide 4K:Bisacrylamide solution (40%), mix 29:1	500 ml	**A0950.0500**
Acrylamide 4K:Bisacrylamide solution (40%), mix 29:1	1 l	**A0950.1000**
Acrylamide:Bisacrylamide solution (40%), mix 29:1, molecular biology grade	1 l	**A0385.1000**
Acrylamide 4K:Bisacrylamide solution (40%), mix 19:1	500 ml	**A1640.0500**
Acrylamide 4K:Bisacrylamide solution (40%), mix 19:1	1 l	**A1640.1000**
Acrylamide:Bisacrylamide solution (40%), mix 19:1, molecular biology grade	500 ml	**A3658.0500**
Acrylamide:Bisacrylamide solution (40%), mix 19:1, molecular biology grade	1 l	**A3658.1000**
Acrylamide 4K:Bisacrylamide solution (30%), mix 37.5:1	500 ml	**A1672.0500**
Acrylamide 4K:Bisacrylamide solution (30%), mix 37.5:1	1 l	**A1672.1000**
Acrylamide:Bisacrylamide solution (30%), mix 37.5:1, molecular biology grade	250 ml	**A3626.0250**
Acrylamide:Bisacrylamide solution (30%), mix 37.5:1, molecular biology grade	500 ml	**A3626.0500**
Acrylamide:Bisacrylamide solution (30%), mix 37.5:1, molecular biology grade	1 l	**A3626.1000**
Acrylamide 4K:Bisacrylamide solution (30%), mix 29:1	500 ml	**A0951.0500**
Acrylamide 4K:Bisacrylamide solution (30%), mix 29:1	1 l	**A0951.1000**
Acrylamide:Bisacrylamide solution (30%), mix 29:1, molecular biology grade	250 ml	**A4983.0250**
Acrylamide:Bisacrylamide solution (30%), mix 29:1, molecular biology grade	500 ml	**A4983.0500**
Acrylamide:Bisacrylamide solution (30%), mix 29:1, molecular biology grade	1 l	**A4983.1000**

Precast gels and buffers, ClearPAGE™

C.B.S. Scientific

These superior quality, precast, composite polymer gels in 10×10 cm plastic cassettes are suitable for both SDS PAGE and DNA/Native PAGE. They are compatible with the DCX-700 Dual Cool mini-vertical slab gel blotting system and the EBU-204 EBX-700 blotting systems. They are also compatible with the XCell Minigel system (Invitrogen) and PAGEr Minigel (Lonza).

- Sharp, clean, consistently straight bands with unsurpassed resolution
- Strong and elastic gels that won't tear or crack
- Single buffer system used for all SDS gels and the lower anode buffer can be recycled to save time and money
- Minimum 1 year shelf life, even for high percentage gels, with no deterioration of performance over time

Description	Pk	Cat. No.
SDS precast gels		
SDS gel 8%, 12-well	10	**731-2008**
SDS gel 8%, 17-well	10	**731-2009**
SDS gel 10%, 1-well	50	**732-1513**
SDS gel 12%, 1-well	50	**732-1514**
SDS gel 10%, 12-well	10	**731-2011**
SDS gel 10%, 17-well	10	**731-2012**
SDS gel 12%, 12-well	10	**731-2014**
SDS gel 12%, 17-well	10	**731-2015**
SDS gel 4 - 20%, 1-well	50	**732-1515**
SDS gel 16%, 12-well	10	**731-2016**
SDS gel 16%, 17-well	10	**731-2017**
SDS gel 4 - 8%, 12-well	10	**731-2018**
SDS gel 4 - 8 %, 17-well	10	**731-2019**
SDS gel 4 - 12%, 12-well	10	**731-2020**
SDS gel 4 - 12%, 17-well	10	**731-2021**
SDS gel 4 - 20%, 2D	10	**731-2023**
SDS gel 4 - 20%, 12-well	10	**731-2024**
SDS gel 4 - 20%, 17-well	10	**731-2025**
Buffers and reducer for SDS protein separations		
LDS sample buffer	2 ml	**731-2000**
LDS sample buffer	10 ml	**731-2001**
DTT reducer, 10X	1 ml	**731-2002**
SDS non-reducing running buffer	50 ml	**731-2003**
SDS non-reducing running buffer	500 ml	**731-2004**
SDS reducing running buffer	50 ml	**731-2005**
SDS reducing running buffer	500 ml	**731-2006**
TGS transfer buffer	500 ml	**731-2007**
Blotting accessories for SDS gels		
Blotting sandwich, 0,2 µm nitrocellulose/1 mm blotting paper, 90×85 mm	2	**731-2054**
Blotting sandwich, 0,2 µm nitrocellulose/1 mm blotting paper, 90×85 mm	20	**731-2055**
Blotting sandwich, 0,2 µm PVDF/1 mm blotting paper, 90×85 mm	2	**731-2056**
Blotting sandwich, 0,2 µm PVDF/1 mm blotting paper, 90×85 mm	20	**731-2057**
DNA/native precast gels		
DNA/native gel 10%, 12-well	10	**731-2045**
DNA/native gel 10%, 17-well	10	**731-2046**
DNA/native gel 2 - 8%, 12-well	10	**731-2047**
DNA/native gel 2 - 8%, 17-well	10	**731-2048**
DNA/native gel 3 - 20%, 12-well	10	**731-2049**
DNA/native gel 3 - 20%, 17-well	10	**731-2050**
Buffer solutions for DNA/native protein separations		
DNA sample buffer	10 ml	**731-2042**
DNA running buffer	500 ml	**731-2044**
Drying frame with 8 clamps	1	**731-2053**
Drying accessories for DNA/native gels		
Gel drying solution	1 l	**731-2052**
Cellophane, pre-cut, 20 sheets	20	**731-2051**

Pipette tips, gel loading, HydroLogix™

Thermo Scientific ART™

Designed for loading vertical electrophoresis gels.

- Choice of round or flat tip
- Available in volumes 1 - 10 µl or 2 - 200 µl
- Intended for loading gels of three thicknesses to suit specific applications

Type	HLT Round Gel 200, universal, graduated	HLT Flat Gel 200, universal, graduated	HLT Round Gel 10	HLT Ultra-Flat Gel 10
Gel thickness	0,6 mm or thicker	0,4 mm or thinner	0,6 mm or thicker	0,2 mm or thinner
Use	Agarose, 2-D and SDS-PAGE, Proteins	Polyacrylamide and DNA sequencing gels	Agarose, 2-D and SDS-PAGE, Proteins	DNA sequencing gels
Volume (µl)	2 - 200		1 - 10	

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	Description	Capacity (µl)	Sterile	Packed	Pk	Cat. No.
	HLT Round Gel 200, universal, graduated	2 - 200	-	Racked, 200 tips per tray	200	**732-2255**
	HLT Flat Gel 200, universal, graduated	2 - 200	-	Racked, 200 tips per tray	200	**732-2256**
	HLT Round Gel 10	1 - 10	-	Racked, 200 tips per tray	200	**732-2337**
	HLT Ultra-Flat Gel 10	1 - 10	-	Racked, 200 tips per tray	200	**732-2339**

NBT (Nitroblue Tetrazolium), molecular biology grade

Widely used in conjunction with BCIP for detection of alkaline phosphatase in molecular biology and immunochemical applications.

Description	Pk	Cat. No.
NBT (Nitroblue Tetrazolium)	1 g	**438592X**

Rapid formaldehyde-free RNA gel kit

The Rapid formaldehyde-free RNA gel kit is a safer alternative to formaldehyde-containing agarose gels for denaturing electrophoresis of RNA. The kit provides a non-volatile substitute for formaldehyde as well as a non-mutagenic RNA stain, which eliminates the need for ethidium bromide staining.

The non-volatile denaturing agent included in the gel solution and loading buffer of both kits effectively eliminates RNA secondary structure to ensure optimal resolution during electrophoresis. Gel casting and electrophoresis can be safely performed on the benchtop without a fume hood. In contrast to formaldehyde-free gel kits containing glyoxal, this kit does not require extended incubation steps or buffer recirculation.

- Hood-free pouring and running - completely formaldehyde-free
- Denature and stain samples in a single step
- Instant band visualisation
- Compatible with down-stream applications, including Northern Blots

Delivery information: Kit includes Rapid RNA gel running buffer, 10X (2×500 ml), Rapid formaldehyde-free RNA gel solution, 10X (150 ml), and formaldehyde-free RNA gel loading buffer, 2X (3×2 ml). Each kit contains sufficient material for 30×50 ml gels.

Description	Pk	Cat. No.
Rapid formaldehyde-free RNA gel kit	1 KIT	**1B1384-KIT**

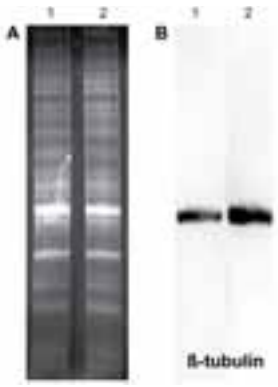
Phosphate buffered saline (PBS), low phosphate

Irradiated solution for use in washing cells.

Description	Pk	Cat. No.
PBS buffer (phosphate buffered saline) with low phosphate	10 l	**444057Y**

For full specifications see VWR BDH Prolabo Chemicals, Reagents, Standards and Media Catalogue.

RapidBlock™ solution, 10X

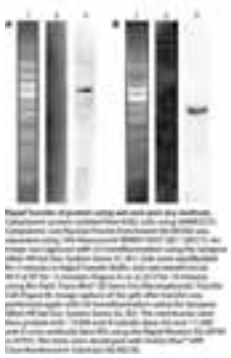


RapidBlock™ solution reduces blocking time to 5 minutes for Western and dot blotting procedures on PVDF and nitrocellulose membranes. This protein-free formulation minimises cross-reactivity and non-specific antibody binding, generating blots with low background and enhanced signal-to-noise ratio.

- Only 5 minutes for PVDF or nitrocellulose blocking
- Reduce background and cross-reactivity
- Enhance chemiluminescent signals
- Protein-free formulation

Description	Pk	Cat. No.
RapidBlock™ solution, 10X	15 ml	**M325-15ML**
RapidBlock™ solution, 10X	100 ml	**M325-100ML**

Rapid Transfer Buffer, 10X



Rapid Transfer Buffer is a simple, single component system for quick and efficient transfer of proteins from SDS-PAGE gels to membranes for Western blotting applications. Transfer is completed in 10 or 20 minutes using a standard semi-dry or wet transfer apparatus, respectively. Rapid Transfer Buffer is a methanol-free, non-hazardous formulation that is compatible with PVDF and nitrocellulose membranes. The transfer efficiency is equivalent to that observed when using a Tris-Glycine-Methanol transfer buffer.

- Transfer in 10 to 20 minutes
- Utilises standard transfer equipment
- Non-hazardous formulation
- Transfers to PVDF and nitrocellulose from multiple types of gels

Description	Pk	Cat. No.
Rapid Transfer Buffer, 10X	1 l	**N789-1L**
Rapid Transfer Buffer, 10X	4 l	**N789-4L**

HEPES free acid, high purity grade

One of the best general purpose buffers available for biological research. Has been used to advantage in tissue culture, oxidative phosphorylation, protein synthesis with cell-free bacterial systems, photophosphorylation, CO_2 fixation. Suitable buffer for TEM studies (Transmission Electron Microscopy) as it does not affect metal substrates. Recommended buffer for the glutamate binding assay, prevents binding to non-receptor materials.

Description	Pk	Cat. No.
HEPES free acid	50 g	**0511-50G**
HEPES free acid	250 g	**0511-250G**
HEPES free acid	1 kg	**0511-1KG**

Tris, ultra pure grade

Biological buffers are useful for cell culture *in vitro*, enzyme assays and some electrophoretic applications at physiological pH. Universally applicable buffers for biochemistry must be water soluble, not interfere with biological processes or biological membranes (penetration, solubilisation, adsorption on surface, etc.), have known complex forming tendency with metal ions, be non toxic and have a very low U.V. absorption at wavelength >260 nm.

Description	Pk	Cat. No.
Tris, ultra pure grade	500 g	**0497-500G**
Tris, ultra pure grade	1 kg	**0497-1KG**
Tris, ultra pure grade	5 kg	**0497-5KG**

Wash buffers

Wash buffers ideal for use in applications such as Western blotting and ELISA. Prevent high background by effectively removing unbound reagents.

Description	Pk	Cat. No.
PBS tablets, each tablet prepares 100 ml of 1X PBS	100 Tab.	**E404-100TABS**
PBS tablets, each tablet prepares 100 ml of 1X PBS	200 Tab.	**E404-200TABS**

VWR CHEMICAL CATALOGUE

Solvents, standards, microbiology media, microscopy and life science products

Request your copy from your local VWR sales office or vwr.com

EZ-Vision® In-Gel Solution

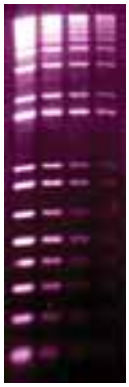
EZ-Vision® In-Gel Solution is a non-mutagenic, non-toxic fluorescent DNA dye that is used as an in-gel or post-run stain to visualise DNA in agarose gels. EZ-Vision® In-Gel Solution is an excellent replacement for the often used, but hazardous, ethidium bromide. As an in-gel preparation for electrophoresis, EZ-Vision® In-Gel Solution is simply added to molten agarose prior to gel casting, allowing instant visualisation of DNA bands upon UV exposure. Alternatively, EZ-Vision® In-Gel Solution can be used to stain the gel after electrophoresis.

- Immediate results
- Easy and convenient
- Eliminates the use of ethidium bromide

Description	Pk	Cat. No.
EZ-Vision® In-Gel Solution, 10 000X concentrate	0,5 ml	**N391-0.5ML**
EZ-Vision® In-Gel Solution, dropper bottle	5 ml	**N391-5MLDRP**
EZ-Vision® In-Gel Solution, dropper bottle	15 ml	**N391-15MLDRP**

Nucleic acid gel stains, GelRed™ and GelGreen™

Biotium



GelRed™ and GelGreen™ are fluorescent nucleic acid gel stains that combine high sensitivity, low toxicity and exceptional stability. GelRed™ is compatible with any standard 312 nm transilluminator; GelGreen™ can be used with a 254 nm UV transilluminator or gel reader with visible light excitation.

- Highly sensitive either as precast gel stains or post gel stains
- Can be microwaved and stored at room temperature
- GelRed™ has been shown to be less mutagenic than ethidium bromide and is available at 10 000X concentration in water for increased safety
- No destaining necessary

Description	Pk	Cat. No.
GelGreen™ 10 000X in DMSO	0,5 ml	**730-2959**
GelGreen™ 10 000X in water	0,5 ml	**730-2961**
GelGreen™ 10 000X in water	10 ml	**730-1343**
GelRed™ 10 000X in DMSO	0,5 ml	**730-2957**
GelRed™ 10 000X in water	0,5 ml	**730-2958**
GelRed™ 10 000X in water	10 ml	**730-2960**
GelRed™ 3X in water	4 l	**730-2956**

Fluorescent nucleotides, Amersham™ CyDye™
GE Healthcare

For labelling DNA and RNA probes, especially for multi-colour analysis in microarrays, FISH, chromosome identification, whole chromosome painting, karyotyping, and gene mapping. CyDye™ labelled nucleotides are available in a range of bright, intense colours with narrow emission bands - ideal for multiplexing with a single sample.

- High sensitivity
- Low non specific binding
- High photostability
- High water solubility
- pH insensitive

Description	Pk	Cat. No.
Bulk pack containing 5×25 nmol Cy3-dCTP plus 5×25 nmol Cy5-dCTP	1 KIT	**PA55321**
Bulk pack containing 5×25 nmol Cy3-dUTP plus 5×25 nmol Cy5-dUTP	1 KIT	**PA55322**
Cy3.5-dCTP, 25 nmol	25 Nmo	**PA53521**
Cy3-CTP, 100 nmol	100 Nmo	**25-8010-86**
Cy3-dCTP, 25 nmol	25 Nmo	**PA53021**
Cy3-dUTP, 25 nmol	25 Nmo	**PA53022**
Cy3-UTP, 100 nmol	100 Nmo	**PA53026**
Cy5.5-dCTP, 25 nmol	25 Nmo	**PA55521**
Cy5-dCTP, 25 nmol	25 Nmo	**PA55021**
Cy5-dUTP, 25 nmol	25 Nmo	**PA55022**
Cy5-UTP, 100 nmol	100 Nmo	**25-8010-87**
Cy5-UTP, 100 nmol	100 Nmo	**PA55026**

Ethidium bromide

Ethidium bromide provided in 0,625 mg/ml dropper bottle. One drop diluted into 50 ml of molten agarose or buffer yields a final concentration of 0,5 µg/ml.

At a concentration of 0,5 µg/ml, ethidium bromide is useful in agarose or acrylamide gels for band detection. It is used to detect as little as 10 ng of nucleic acid. At higher concentrations (0,5 - 1,0 µg/ml), it may be used to facilitate purification of DNA in a caesium chloride gradient.

Description	Pk	Cat. No.
Ethidium bromide, dropper bottle, 0,625 mg/ml	5 ml	**E406-5ML**
Ethidium bromide, dropper bottle, 0,625 mg/ml	15 ml	**E406-15ML**

Destaining bags

Destaining bags are designed to safely remove ethidium bromide from solution during overnight treatment. Each bag extracts up to 5 mg of ethidium bromide from solution, thus minimising the exposure of research personnel to this toxic material. The special absorbent mixture retains dye molecules in a convenient bag for removal and incineration.

- Removes up to 5 mg ethidium bromide per bag
- Minimises exposure to toxic materials
- Easiest ethidium bromide removal available

Description	Pk	Cat. No.
Destaining bags	25	**E732-25**

Staining boxes, Nalgene®
Thermo Scientific

TPX with PP-copolymer cover

Makes it easier to stain, fix, de-stain and handle fragile gels and membranes with less chance of damage than conventional methods. Resistant to acids, bases and select organic solvents.

- Leakproof LDPE plug allows easy drainage with minimal gel handling
- Usable from –70 to +70 °C
- Stackable with two handles

Description	Pk	Cat. No.
Staining box for 500 ml, 125×125×50 mm	2	**216-8271**
Staining box for 700 ml, 225×225×50 mm	2	**216-8272**

Molecular weight markers, Rainbow™
GE Healthcare

Rainbow™ molecular weight markers enable faster and simpler identification of proteins on SDS-polyacrylamide gels. The ready-to-load markers provide sharper, more intense bands on gels and blots, and have improved band spacing for more accurate molecular weight determination. The bright, distinctive colours of the markers allow easier confirmation of transfer to blotting membranes and orientation.

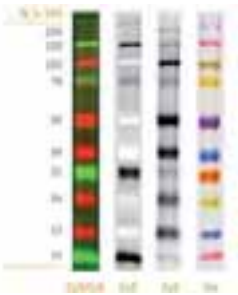
Rainbow™ molecular weight markers comprise a mixture of individually coloured proteins that are combined to produce bands of equal colour intensity. Depending on the product, the approximate protein concentration is 1 to 2 mg/ml. Each 250 µl pack size is sufficient for use with 50 minigels (10×8 cm) or 25 large gels (20×20 cm).

- Full-Range Rainbow™ markers (MW 12 000 to 225 000) use 10 separate proteins with 6 different colours; High-Range Rainbow™ markers (MW 12 000 to 225 000) use 8 separate proteins with 6 different colours; Low-Range Rainbow™ markers (MW 3500 to 38 000) use 7 separate proteins with 5 different colours
- Monitor progress of protein electrophoresis and assess transfer efficiency and molecular weight of blotted proteins without staining
- High intensisty, pre-stained, multi-coloured bands allow distinction of closely related proteins
- For use on SDS-PAGE

Storage: Store at –15 °C to –30 °C.

Description	Pk	Cat. No.
Low-Range Rainbow™ molecular weight markers	250 µl	**RPN755E**
High-Range Rainbow™ molecular weight markers	250 µl	**RPN756E**
Full-Range Rainbow™ molecular weight markers	250 µl	**RPN800E**

Molecular weight markers, Amersham™ ECL™ Plex™ fluorescent Rainbow™ markers
GE Healthcare



Amersham™ ECL™ Plex™ fluorescent Rainbow™ markers are protein molecular weight markers optimised for use with the ECL™ Plex™ Western blotting detection system. They are designed to provide visible marker bands on gels and membranes, as well as fluorescent images using Cy3 and Cy5 channels.

- Broad colour spectrum for easier band identification
- Sharper, more intense bands on gels and blots
- Improved band spacing for more accurate molecular weight determination
- Ready-to-load formulations

Description	Pk	Cat. No.
Amersham™ ECL™ Plex™ fluorescent Rainbow™ markers	120 µl	**RPN850E**
Amersham™ ECL™ Plex™ fluorescent Rainbow™ markers	500 µl	**RPN851E**

Protein and peptide molecular weight markers
GE Healthcare

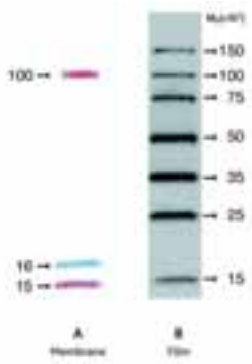
For determination of molecular weight of uncharacterised protein samples with precision by comparison with carefully selected standards.

- Clear, sharp bands for easy measurement of migration distances
- Bands can be visualised by using stains such as Deep Purple™ total protein stain, Coomassie® brilliant blue, or silver staining

Description	Pk	Cat. No.
HMW native marker kit (66 000 - 669 000), 10×250 µg	10 Vial	**17-0445-01**
LMW-SDS marker kit (14 000 - 97 000), 10×575 µg	10 Vial	**17-0446-01**
HMW-SDS marker kit (53 000 - 220 000), 10×175 µg	10 Vial	**17-0615-01**

Western blotting markers, Amersham™ ECL™ DualVue™

GE Healthcare



Amersham™ ECL™ DualVue™ Western blotting markers perform two key functions. Firstly, the prestained marker proteins confirm protein transfer in addition to clearly defining blot orientation. Secondly, the recombinant tagged proteins are detected on film or by CCD imaging in conjunction with the target protein(s) of interest, enabling highly accurate molecular mass determination of the target protein(s). The tagged markers are detected easily and specifically by means of a specific conjugate that eliminates any cross contamination between target protein(s) and markers.

- Detect proteins on gel and membrane as well as on film
- Prestained markers indicate efficiency of protein transfer to membrane and blot orientation
- Tagged recombinant protein markers allow accurate calculation of molecular weight of target protein(s)
- Product is compatible with any HRP substrate as well as both PVDF and nitrocellulose membrane types

Delivery information: Amersham™ ECL™ DualVue™ Western blotting markers contain a mixture of 3 prestained coloured markers of defined molecular weight (MW 15 000 to 100 000) and 7 tagged recombinant proteins (molecular weights from 15 000 to 150 000). Each pack contains ECL™ DualVue™ markers (125 µl) and S-protein-HRP conjugate (50 µl), sufficient for 25 standard gel loadings.

Description	Pk	Cat. No.
Amersham™ ECL™ DualVue™ Western blotting markers	1 KIT	**RPN810**

Molecular weight markers, M.W. 12,3-78 kDa, calibration kit for SDS PAGE, Electran®

This product is tested for its suitability for use on Tris-based discontinuous buffer systems using a method based on that of Laemmli. It consists of a mixture of 6 electrophoretically homogeneous proteins.

Description	Pk	Cat. No.
Molecular weight markers, calibration kit for SDS PAGE	2 mg	**442642L**

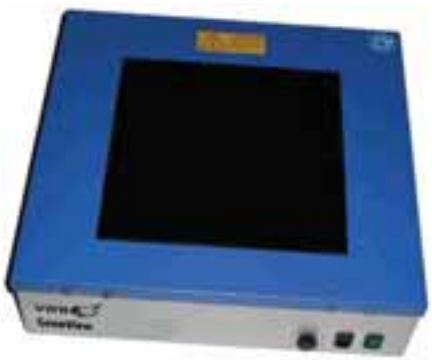
Protein MW markers, Prism

The Prism protein marker contains 6 purified proteins stained orange, blue, and violet for easy molecular weight estimation of samples. The bands ranging from 19 to 130 kDa can simplify monitoring protein migration during electrophoresis, and subsequently assess protein transfer efficiency to a blotting membrane. Prism protein marker is ready to load and may be applied to lab-prepared or commercial pre-cast gels. Sufficient material for 50 - 100 lanes.

- 6 bands ranging from 19 to 130 kDa
- 3 vibrant colours for easy band identification

Description	Pk	Cat. No.
Prism protein marker	500 µl	**1B1349-500UL**
Prism protein marker	50 µl	**1B1349-50UL**

UV transilluminators, GenoView



All GenoView transilluminators have variable intensity settings and provide an even illumination.

- Choice of filter sizes
- Variable intensity setting
- Safety cut-off

Description	Dimensions (mm)	Pk	Cat. No.
UV transilluminators for use with high resolution gel documentation systems			
UV transilluminator (200×200 mm, 254 nm)	335×310×100	1	**730-3036**
UV transilluminator (250×300 mm, 254 nm)	335×310×100	1	**730-3038**
UV transilluminator (200×200 mm, 254/302 nm)	335×310×100	1	**730-3042**
UV transilluminator (250×300 mm, 254/302 nm)	335×310×100	1	**730-3044**
UV transilluminator (200×200 mm, 254/365 nm)	335×310×100	1	**730-3039**
UV transilluminator (250×300 mm, 254/365 nm)	335×310×100	1	**730-3041**
UV transilluminator (200×200 mm, 302 nm)	335×310×100	1	**730-3045**
UV transilluminator (250×300 mm, 302 nm)	335×310×100	1	**730-3047**
UV transilluminator (200×200 mm, 302/365 nm)	335×310×100	1	**730-3030**
UV transilluminator (250×300 mm, 302/365 nm)	335×310×100	1	**730-3032**
UV transilluminator (200×200 mm, 365 nm)	335×310×100	1	**730-3027**
UV transilluminator (250×300 mm, 365 nm)	335×310×100	1	**730-3029**
UV transilluminators for use with GenoSmart2			
UV transilluminator (200×200 mm, 254 nm)	241×315×80	1	**730-1384**
UV transilluminator (200×200 mm, 302 nm)	241×315×80	1	**730-1382**
UV transilluminator (200×200 mm, 365 nm)	241×315×80	1	**730-1383**
UV transilluminators for use with GenoMini			
UV transilluminator (200×200 mm, 254 nm)	241×315×80	1	**730-1388**
UV transilluminator (200×200 mm, 302 nm)	241×315×80	1	**730-1386**
UV transilluminator (200×200 mm, 365 nm)	241×315×80	1	**730-1387**

Description	Pk	Cat. No.
Replacement tubes for transilluminators		
Long wave tube, 365 nm, 8 W	1	**730-1251**
Medium wave tube, 302 nm, 8 W	1	**730-2902**
Short wave tube, 254 nm, 8 W	1	**730-2909**
Accessories		
Lid for single wavelength UV transilluminators (all sizes)	1	**730-1348**

UV transilluminators, Benchtop series

UVP

All Benchtop transilluminators are compact, lightweight and offer an economical alternative to the High Performance series transilluminators. With the exception of model M-10E, all single wavelength models are equipped with an 8 W, 302 nm UV tube. Hi/Med/Lo intensity settings (on single UV wavelength models) are for UV illumination fluorescence viewing and photography applications. The 'Lo' intensity setting reduces photonicking and the 'Hi' and 'Med' intensity settings are for analytical documentation work.

The dual UV model is the same size and design as other Benchtop models, but has single intensity and is equipped with mid-range (302 nm) and longwave (365 nm) UV in one unit. The triple wavelength models provide the selection of 365 nm, 302 nm and 254 nm in one compact unit.

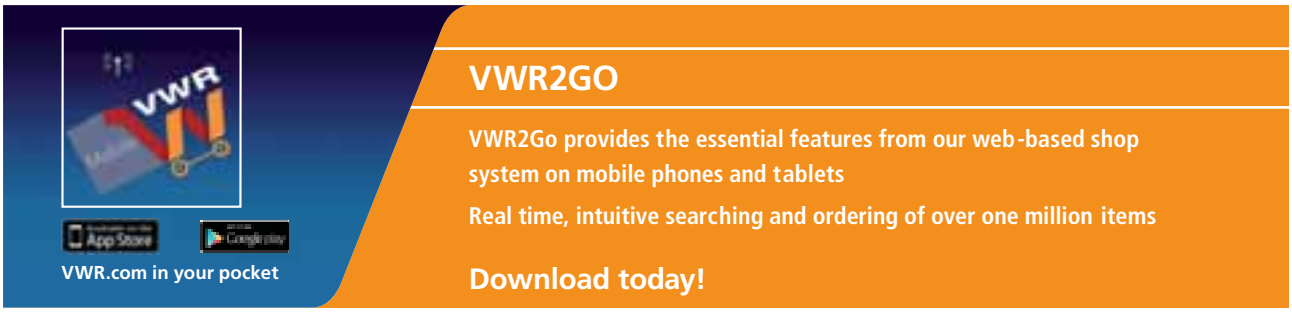
- Choice of filter area work surface sizes available
- Single UV wavelength models have Hi/Med/Lo intensity settings which can be switched, depending on the requirements of the application
- Dual UV models offer the choice of longwave to allow viewing of gels for extended periods, or mid-range to increase fluorescence for photodocumentation
- Triple wavelength models provide longwave, mid-range and shortwave UV all in one unit
- Clear UV blocking cover included

W×D×H (M-10E only): 260×184×114 mm
W×D×H (dual UV models and single UV/variable intensity models, except M-10E): 356×279×122 mm
W×D×H (triple UV models): 356×279×137 mm
Note: Height includes UV blocking cover

Weight: 6,8 kg

Model	Wavelength (nm)	Output (W)	Filter size (mm)	Pk	Cat. No.
Transilluminators with single wavelength, single intensity					
M-10E	302	6	100×100	1	**732-1110**
Transilluminators with single wavelength, Hi/Med/Lo intensity					
M-15V	302	8	150×150	1	**732-4390**
M-20V	302	8	200×200	1	**732-4389**
M-26V	302	8	210×260	1	**732-4391**
M-26XV	302	8	250×260	1	**732-4368**
Transilluminators with dual wavelength, single intensity					
LM-20	302/365	8	200×200	1	**732-4388**
LM-26	302/365	8	210×260	1	**732-4392**
Transilluminators with triple wavelength, single intensity					
LMS-20	254/302/365	8	200×200	1	**732-4372**
LMS-26	254/302/365	8	210×260	1	**732-4369**

Description	Pk	Cat. No.
Tubes for Benchtop transilluminators		
Replacement shortwave (254 nm) UV tube, 8 W	1	**730-1429**
Replacement mid-range (302 nm) UV tube, 8 W	1	**730-1014**
Replacement longwave (365 nm) UV tube, 8 W	1	**730-1428**



UV transilluminators, High Performance series
UVP

Single wavelength

These High Performance UV transilluminators, with four 25 W tubes, provide 100 W of high intensity and uniform UV illumination for high fluorescence and sensitivity when viewing stained gels. Hi/Med/Lo intensity settings (on selected models) are for UV illumination, fluorescence viewing and photography applications. The 'Lo' intensity setting reduces photonicking or photobleaching of gel samples during prep work, allowing for extended gel preparation time. The 'Hi' and 'Med' intensity settings are used in analytical documentation work.

Dual UV models are the same size and design as other High Performance models, but have single intensity and are equipped with mid-range (302 nm) and longwave (365 nm) UV in one unit.

- Stainless steel frame enables easy cleaning and reduces sample contamination
- Brilliant back-lit fluorescence illumination is enhanced with a background uniformity screen and UVG™ long-life filter
- Hi/Med/Lo intensity settings (on selected models) enable settings to be switched, depending on the requirements of the application
- Powerful cooling fan maintains a low filter surface temperature to avoid sample damage, and maintains a constant UV intensity
- Removable protective UV blocking cover is hinged and can be height adjusted to provide a suitable viewing angle or for access to the filter surface

W×D×H: 486×337×143 mm (height including clear UV blocking cover)

Weight: 9,6 kg

Model	Wavelength (nm)	Output (W)	Filter size (mm)	Pk	Cat. No.
Transilluminators with single wavelength, Hi/Med/Lo intensity					
TFS-20V	254	4×25	200×200	1	**732-4381**
TFS-26V	254	4×25	210×260	1	**732-4382**
TFS-30V	254	4×25	250×300	1	**732-4383**
TFS-40V	254	4×25	200×400	1	**732-4384**
TFM-20V	302	4×25	200×200	1	**732-4377**
TFM-26V	302	4×25	210×260	1	**732-4376**
TFM-30V	302	4×25	250×300	1	**732-4378**
TFM-40V	302	4×25	200×400	1	**732-4375**
TFL-40V	365	4×25	200×400	1	**732-4374**
Transilluminators with dual wavelength, single intensity					
TFML-20	302/365	4×25	200×200	1	**732-4385**
TFML-26	302/365	4×25	210×260	1	**732-4379**
TFML-30	302/365	4×25	250×300	1	**732-4386**
TFML-40	302/365	4×25	200×400	1	**732-4380**

Description	Pk	Cat. No.
Tubes for High Performance transilluminators		
Replacement longwave (365 nm) UV tube, 25 W	1	**UVPA34-0060-01**
Replacement mid-range (302 nm) UV tube, 25 W	1	**UVPA34-0073-01**
Replacement shortwave (254 nm) UV tube, 25 W	1	**730-1016**

For details about other options, including FirstLight UV illuminators (designed to provide extremely uniform UV illumination critical for accurate quantitative analysis), please contact your local VWR Sales Office.

White light transilluminators
UVP

White light transilluminators offer uniform light diffusion for autoradiographs, negatives, X-ray film, film positives, microtitre plates and gels.

- Glass surfaces of the transilluminator are double-safety sealed into the unit for durability, providing a scratch- and chemical-resistant work area

W×D×H: 337×241×108 mm

Weight: 3,8 kg

Model	Output	Filter size (mm)	Pk	Cat. No.
TW-26	8	210×260	1	**730-1002**

UV to white light converter plates
UVP

The specially designed converter plate converts UV radiation from the transilluminator using a white light diffuser to enable Coomassie® Blue or silver stained protein gels to be viewed.

- Handles are situated on opposite sides of the converter plate for easy handling

Model	Pk	Cat. No.
210×260 mm	1	**730-1017**
200×400 mm	1	**730-1018**

UV crosslinkers
UVP

732-4302

732-4305

UV crosslinkers assure consistent UV output for many applications, including DNA bonding (shortwave) and gel electrophoresis (mid-range). UV crosslinking for attaching nucleic acids to a membrane, for example, takes seconds as compared to oven baking. The crosslinkers utilise a microprocessor to control and measure the dose of UV radiation.

- Preset and manual controls for ultraviolet or time exposures - factory presets deliver 120 000 microjoules or 5 minutes of exposure
- Microprocessor measures and controls UV output, ensuring maximum energy efficiency
- Large LED display and touch panel which displays time or energy settings
- Window on the door allows viewing of the process, yet blocks the UV radiation
- Overhead UV light supplies uniform UV illumination

The CX-2000 crosslinker features a pull-out drawer and shortwave UV. It operates with the same functions as the CL-1000 above.

The TL-2000 translinker comprises the shortwave (254 nm) ultraviolet CL-1000 crosslinker with an M-20V transilluminator (mid-range UV, 302 nm, with 20×20 cm filter) built into the crosslinker cabinet. The on/off controls for the transilluminator are located on the crosslinker panel.

Model	CL-1000	CL-1000L	CL-1000M	CX-2000	TL-2000
External W×D×H (mm)	396×248×222			381×445×248	483×348×222
Internal W×D×H (mm)	254×305×127			287×290×91	-
Weight (kg)	7,5				16,4

Model	Description	Wavelength (nm)	Pk	Cat. No.
CL-1000	Crosslinker	254	1	**732-4302**
CL-1000L	Crosslinker	365	1	**731-0191**
CL-1000M	Crosslinker	302	1	**732-4304**
CX-2000	Crosslinker, with pull-out draw	254	1	**732-4306**
TL-2000	Translinker	254 nm crosslinker/302 nm transilluminator	1	**732-4305**

UV viewing cabinets, Mini Chromato-Vue®

UVP

The C-10 cabinet is designed for use with compact UV lamps (4 W, such as models UVGL-15 or UVGL-25, or handheld UV lamps (6 W), such as the UVGL-58. The C-15G Mini UV cabinet combines the C-10 cabinet with the handheld UVGL-58 multi-band shortwave/longwave UV lamp.

- Special contrast control filter absorbs UV energy and protects eyes from harmful shortwave radiation
- Comfortable soft rubber viewport with adequate space for eyeglasses
- Lightweight access curtain provides easy entry and blocks out external light from cabinet interior
- Removable bottom panel allows cabinet to be placed over large or bulky items for fluorescence inspection

Cabinet interior (L×W×H): 229×254×178 mm
Cabinet exterior (L×W×H): 229×267×305 mm

Description	Output (W)	Wavelength (nm)	Pk	Cat. No.
Model C-10, cabinet only	-	-	1	**630-0714**
Model C-15G, cabinet with UVGL-58 lamp	6	254/365	1	**630-0715**

UV inspection lamps, Compact series

UVP

Plastic

These compact UV lamps can be used as a handheld instrument and/or a bench top device in combination with an optional stand. Suitable for a wide range of uses. UV tubes and filters can be replaced simply and conveniently.

- For use in shortwave (254 nm) or longwave (365 nm) bands
- UVGL-15 offers a choice of wavelengths using the slideable selector
- UVGL-25 can be switched from short to longwave; UVGL-15 features UV multi-wave tube 254/365 nm
- UVGL-25 with 1×254 nm and 1×365 nm UV tube

W×D×H: 198×71×53 mm

Weight: 0,45 kg

Model	Output (W)	Wavelength (nm)	Pk	Cat. No.
UVGL-15	4	365/254	1	**732-0858**
UVGL-25	4	365/254	1	**732-0859**

Description	For	Pk	Cat. No.
Replacement tubes			
Replacement shortwave UV tube	UVG-11, UVGL-25	1	**733-2062**
Replacement longwave UV tube	UVL-21, UVGL-25	1	**630-0709**
Replacement split UV tube	UVGL-15	1	**630-0708**

Handheld UV lamps

UVP

Plastic

These lightweight lamps can be used with the optional lamp stand for hands-free operation. Replacement tubes are also available.

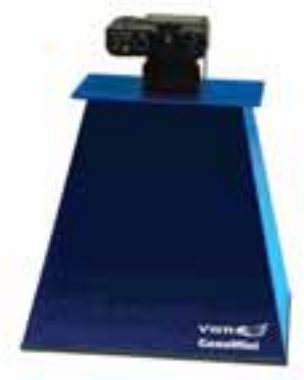
W×D×H: 81×378×64 mm

Weight: 0,9 kg

Model	Output (W)	Wavelength (nm)	Pk	Cat. No.
UVGL-58	6	254/365	1	**732-0857**
UVM-57	6	302	1	**730-1024**

Description	Pk	Cat. No.
Replacement UV tubes		
Replacement shortwave UV tube	1	**630-0710**
Replacement longwave UV tube	1	**630-0711**
Replacement mid-range UV tube	1	**730-1015**
Other accessories		
Replacement filter for UVGL-58	1	**630-0717**
Lamp stand, 65×190×124 mm	1	**730-1036**

Gel documentation system, GenoMini



The GenoMini offers reproducible, high resolution digital images for gel documentation. The system is easy to use and allows real time images to be captured and viewed directly on a PC or laptop.

The GenoMini is used with a UV transilluminator that provides illumination from below the gel (the usual configuration for looking at Ethidium Bromide DNA gels). Other options include the use of transmitted white or blue light and, with a mini darkroom, overhead white and UV light. These flexible lighting options make the GenoMini suitable for generating images of a wide range of fluorescent samples.

Using the GenoMini it is possible to produce images of electrophoresis gels stained with any of the following dyes: Ethidium Bromide, Coomassie Blue, Silver Stain, SYBR® Gold, SYBR® Green, SYBR® Safe, GelStar®, SYPRO® Red, SYPRO® Ruby, SYPRO® Orange, Fluorescein, Rhodamine Red™, Texas Red™, Pro-Q® Diamond or Deep Purple™. As new dyes are released we work to optimise their use with the GenoMini, so please ask your VWR contact for updates.

GenoMini is also suitable for viewing and capturing images from agar plates of dark, light, or two colour colonies, cells in flasks, autoradiographs, DNA, RNA or protein on membranes, spot and slot blots of DNA, RNA or protein, cells or solutions in microtitre plates and DNA or protein macroarrays.

GenoMini is the ideal system for laboratories on a limited budget, as the basic system can be purchased and then added to with options such as a UV transilluminator, white light transilluminator or conversion screen, safety hood, mini darkroom and printer.

- Digital camera with 18 megapixel resolution produces high definition images
- Hardware and software options allow the system to be cost-effectively upgraded as fluorescent applications change
- PC interface allows easy automation of image viewing and camera control
- Simple zoom and auto-focus functions to rapidly capture gels of any size

Model	GenoMini
Camera	Digital CCD
Camera resolution (pixels)	18 megapixels

Description	Pk	Cat. No.
GenoMini gel documentation system	1	**730-3002**

Description	Dimensions mm	Pk	Cat. No.
UV transilluminators for use with GenoMini			
UV transilluminator (200×200 mm, 254 nm)	241×315×80	1	**730-1388**
UV transilluminator (200×200 mm, 302 nm)	241×315×80	1	**730-1386**
UV transilluminator (200×200 mm, 365 nm)	241×315×80	1	**730-1387**
Blue light LED transilluminators, GenoView Blue			
UV transilluminator (100×120 mm, 488 nm)	210×210×30	1	**730-1390**

Please contact your local VWR sales office for full details about options and accessories available for this system.

Gel documentation system, GenoSmart2

The GenoSmart2 is a compact imaging system with manual control that is simple to use and is ideal for routine DNA and protein gel documentation. The GenoSmart2 has network capability using an Ethernet connection. This easy to upgrade system is supplied complete with GenoSoft analysis software. Gel images can be instantly printed or saved to a memory stick via the USB port for archiving or further processing.

Using the GenoSmart2 it is possible to produce images of electrophoresis gels stained with any of the following dyes: Ethidium Bromide, Coomassie Blue, Silver Stain, SYBR® Gold, SYBR® Green, SYBR® Safe, GelStar®, SYPRO® Red, SYPRO® Ruby, SYPRO® Orange, Fluorescein, Rhodamine Red™, Texas Red™, Pro-Q® Diamond or Deep Purple™. As new dyes are released we work to optimise their use with the GenoSmart2, so please ask your VWR contact for updates.

GenoSmart2 is also suitable for viewing and capturing images from agar plates of dark, light or two colour colonies, cells in flasks, autoradiographs, DNA, RNA or protein on membranes, spot and slot blots of DNA, RNA or protein, cells or solutions in microtitre plates and DNA or protein macroarrays.

This simple system requires little training.

- Real time images from 12/16 bit, 2 megapixel camera
- Self-contained, microprocessor controlled darkroom
- Integrated colour LCD screen for image viewing
- Instant on-screen saturation detection
- Rapid photographic print production and secure image storage via USB memory stick or network connection

Model	GenoSmart2
Camera	Digital CCD
Camera resolution (pixels)	2 megapixels
File bit depth (A/D)	12/16 bit extended

Continued on next page

Continued from previous page

Description	Pk	Cat. No.
GenoSmart2 gel documentation system	1	730-1381

Description	Dimensions (mm)	Pk	Cat. No.
UV transilluminators for use with GenoSmart2			
UV transilluminator (200×200 mm, 254 nm)	241×315×80	1	730-1384
UV transilluminator (200×200 mm, 302 nm)	241×315×80	1	730-1382
UV transilluminator (200×200 mm, 365 nm)	241×315×80	1	730-1383
Blue light LED transilluminators, GenoView Blue			
UV transilluminator (100×120 mm, 488 nm)	210×210×30	1	730-1390
Accessories			
Thermal printer, digital		1	730-1260
Thermal paper, matt		1 Roll	730-2892
Thermal paper, glossy		1 Roll	733-2000
Visible light converter (UV to white light)		1	730-1395

Gel documentation and analysis systems, high resolution

High resolution gel documentation and analysis systems are available in configurations suitable for all fluorescence and chemiluminescence applications. All models are fitted with a digital CCD camera (2, 1,4 or 5 megapixels) which utilises the latest USB technology. The standard system offers a choice of camera resolution options, with a 12-bit camera that can be software modified to 16-bit. The CHEMI systems are equipped with a true 16-bit advanced cooled camera able to capture images of a wide range of chemiluminescent samples using common substrates.

The systems are fully computer controlled, with motor driven lenses as standard in both systems, with feedback as standard for CHEMI models. The darkroom, fully light-tight and suitable for advanced chemiluminescent applications, has a robust, wide opening hinged door for easy access to the chamber and electronic auto-door lock with security function to prevent interruption during long exposures.

High resolution systems incorporate advanced image capture software specifically developed to simplify the process of capturing gel images. GenoCapture image acquisition software is a fully automatic package that controls camera integration, exposure, lens and capture options with auto-focus configuration for precise focusing. GenoSoft is an advanced, automated, analysis software that can rapidly analyse a gel from loading to output of results in a matter of seconds. Requiring minimal user training, GenoSoft is able to handle a wide range of media including gels, plates, films and spot blots.

- Modular system can be tailored to meet specific user requirements
- Automated PC control speeds up image capture and the analysis process
- 16-bit performance for very accurate gel data
- Auto-locking door protects against accidental UV exposure and large door opening provides easy access for gel positioning and viewing
- Optional motor driven optics and lighting options for easy system set-up and flexible imaging applications

Delivery information: The standard system includes a 12-bit digital CCD camera (16-bit file depth), motorised zoom lens, and UV filter (550 to 640 nm). The CHEMI systems include a 16-bit cooled digital CCD camera, motorised zoom lens with feedback, and 7-position motor driven filter wheel. All systems include a cabinet, white epi-light (overhead), GenoSoft analysis and GenoCapture image capture software, cables and support software pack. Note: A transilluminator is required but not supplied. Light converters (optional) can also be ordered separately. Please contact your local VWR office for details.

Illumination	
UV transilluminator	20×20 cm or 25×30 cm
Visible light converter	Optional
Fold down white light table	Optional
Blue light transilluminator	20×16 cm
White Epi (overhead)	Yes
RGB Epi	Optional
UV Epi	254, 302 or 365 nm
Software	GenoCapture and GenoSoft included

Model	Standard 2	CHEMI 1,4	CHEMI 5
Camera	CCD		
Camera resolution (pixels)	2 megapixels	1,4 megapixels	5 megapixels
Cooling	Ambient	–28 °C	
Dynamic range	3,6 analogue / 4,8 digital	4,8 digital	
File bit depth (A/D)	12/16 bit	16 bit digital	
Zoom lens	Motorised (f/1,2)	Motorised (12,5 - 75 mm)	

Description	Pk	Cat. No.
Gel documentation and analysis system, 2 MP	1	730-1379
CHEMI gel documentation and analysis system, 1,4 MP	1	730-3003
CHEMI gel documentation and analysis system, 5 MP	1	730-1380

Description	Pk	Cat. No.
UV transilluminators for use with high resolution gel documentation systems		
UV transilluminator (200×200 mm, 254 nm)	1	730-3036
UV transilluminator (250×300 mm, 254 nm)	1	730-3038
UV transilluminator (200×200 mm, 254/302 nm)	1	730-3042
UV transilluminator (250×300 mm, 254/302 nm)	1	730-3044
UV transilluminator (200×200 mm, 254/365 nm)	1	730-3039
UV transilluminator (250×300 mm, 254/365 nm)	1	730-3041
UV transilluminator (200×200 mm, 302 nm)	1	730-3045
UV transilluminator (250×300 mm, 302 nm)	1	730-3047

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Description	Pk	Cat. No.
UV transilluminators for use with high resolution gel documentation systems		
UV transilluminator (200×200 mm, 302/365 nm)	1	**730-3030**
UV transilluminator (250×300 mm, 302/365 nm)	1	**730-3032**
UV transilluminator (200×200 mm, 365 nm)	1	**730-3027**
UV transilluminator (250×300 mm, 365 nm)	1	**730-3029**
Blue light LED transilluminators, GenoView Blue		
UV transilluminator (200×160 mm, 488 nm)	1	**730-1389**
Accessories		
Thermal printer, digital	1	**730-1260**
Thermal paper, matt	1 Roll	**730-2892**
Thermal paper, glossy	1 Roll	**733-2000**

Gel documentation systems, PhotoDoc-It™ 65

UVP

The PhotoDoc-It™ 65 is designed to capture, print and save colour images for basic gel documentation without the need for film.

- Digi 65 colour camera with >14 megapixel resolution - view images on the camera or the optional colour LCD screen
- Lightweight hood provides a compact darkroom environment
- Save images to memory card or instantly generate 10×15 cm (4×6") low cost colour prints using the photo printer included
- Ethidium bromide filter for fluorescent stained gels (EtBr Red 570 - 640 nm), positioned inside hood, is easily interchangeable for other filter types
- Combination lock secures the camera to the darkroom

W×D×H: 337×241×432 mm

Delivery information: System supplied with colour printer and with or without Benchtop UV transilluminator.

Description	Pk	Cat. No.
PhotoDoc-It™ 65 without transilluminator	1	**732-1248**
PhotoDoc-It™ 65 with M20V transilluminator (20×20 cm filter, 302 nm UV)	1	**732-1249**
PhotoDoc-It™ 65 with LM20 transilluminator (20×20 cm filter, 302/365 nm UV)	1	**732-1226**
PhotoDoc-It™ 65 with M26V transilluminator (21×26 cm filter, 302 nm UV)	1	**732-1227**
PhotoDoc-It™ 65 with LM26 transilluminator (21×26 cm filter, 302/365 nm UV)	1	**732-1228**

Description	Pk	Cat. No.
Accessories for PhotoDoc-It®		
Monitor, PAL/NTSC, 12 VDC power, 5.6" TFT LCD	1	**732-1250**

Gel documentation systems, MultiDoc-It™

UVP

The MultiDoc-It™ 125 imaging system is designed for multiple user laboratories using fluorescent imaging for capturing gels, plates, and membrane images. The high resolution camera is controlled by UVP image capture and enhancement software.

- DigiCam 125 digital SLR colour camera with >12 megapixel resolution
- Sturdy darkroom with interlocked door, light-tight with interior overhead white light, wide access door and UV blocking view port
- Capture software included
- Modular for adding optional overhead UV lamps

W×D×H: 356×323×483 mm

Delivery information: System includes ethidium bromide filter on 3-position filter slider and Doc-It LS acquisition and camera control software (with 21-CFR-Part 11 support). An external PC is required but not supplied.

Description	Pk	Cat. No.
MultiDoc-It™ 125 with M-20V (8 W) transilluminator, 302 nm, 20×20 cm filter, variable intensity	1	**733-2044**
MultiDoc-It™ 125 with LM-20 (8 W) transilluminator, 302/365 nm, 20×20 cm filter, single intensity	1	**733-2045**
MultiDoc-It™ 125 with M-26V (8 W) transilluminator, 302 nm, 21×26 cm filter, variable intensity	1	**733-2046**
MultiDoc-It™ 125 with LM-26 (8 W) transilluminator, 302/365 nm, 21×26 cm filter, single intensity	1	**733-2047**

Note: Please contact your local VWR sales office for full details on the options and accessories available for this system.

Gel documentation systems, GelDoc-It®2 310

UVP

The GelDoc-It®2 310 imaging systems are designed for imaging fluorescent gels, visible stains, autoradiograph film and colony plates. Both systems include a high resolution scientific grade camera (manual or motorised zoom lens) with real-time preview controlled by PC (not included).

- Modular design allows the addition of UV modules and a white light illuminator for multiple imaging applications
- Four position filter wheel with red filter (570 - 640 nm) included; green (510 - 560 nm), gold (520 - 620 nm) and other filters available as options
- UV protective viewing port allows gels to be viewed safely whilst imaging
- Roll-out transilluminator tray for easy insertion and removal of gels (transilluminator not included)
- BioLite multi-spectral light unit and filters can be added for multiplex imaging capability

Delivery information: Both systems include 2 megapixel CCD camera (file depth 16-bit), light-tight darkroom, ethidium bromide filter, and manual or motorised zoom lens (12,5 to 75 mm f/1,2). VisionWorks®LS image acquisition and enhancement software is not included and must be ordered separately. A PC is also required but not included.

A FirstLight UV illuminator or Benchtop UV transilluminator needs to be added for a fully functional system.

Model	GelDoc-It®2 310 (manual)	GelDoc-It®2 310 (motorised)
Camera	12-bit Gel 310 CCD	
Camera resolution (pixels)	2 megapixels, 1600×1200	
CCD bit depth	12-bit	
File bit depth (A/D)	16-bit	
W×D×H (mm)	440×370×850	
Zoom lens	Manual (f/1,2) 12,5 - 75 mm	Motorised (f/1,2) 12,5 - 75 mm

Description	Pk	Cat. No.
GelDoc-It®2 310 with manual zoom	1	**733-2050**
GelDoc-It®2 310 with motorised zoom	1	**733-2051**

Description	Pk	Cat. No.
Accessories		
Digital thermal printer, UP-D897	1	**733-2033**
Thermal paper, high gloss, for UP-D897 and UP-895 printers (200 images per roll)	5 Roll	**733-2032**
VisionWorks®LS image acquisition software	1	**733-2034**
VisionWorks®LS image acquisition, enhancement and 1D analysis software, single copy	1	**733-2035**
VisionWorks®LS image acquisition, enhancement and 1D analysis software, network	1	**733-2036**
VisionWorks®LS image acquisition, enhancement and 1D analysis software, second copy	1	**733-2037**
Automated BioLite™ unit for *in vivo* studies, with transilluminator fibre optics, for darkroom with top access port*	1	**733-2349**

* No excitation filters are included with the BioLite unit. Please ask for details of the available choice.

Gel documentation system, GelDoc-It®TS2 310

UVP

The GelDoc-It®TS2 imaging system is a high specification, small footprint, stand-alone system for imaging visible stains, autoradiograph film and colony plates. The system is completely controlled via the 15" touch screen. Images can be saved via the network or quickly onto a USB stick using the port on the front of the unit.

- The 2 megapixel (1600×1200) monochrome camera acquires detailed images with good sensitivity
- Software interface shows live and captured images with options for date, file name, rotate, invert and saturation warning
- UV lights are automatically switched off when the door is opened and a UV protective viewing port allows visualisation of samples without needing to open the door
- Roll-out transilluminator tray for easy insertion and removal of gels (transilluminator not included)
- BioLite multi-spectral unit and filters can be added for multiplex imaging capability

Delivery information: The system includes a 2 megapixel CCD camera (file depth 16-bit), light-tight darkroom with built-in computer and 15" colour touch screen interface, ethidium bromide filter, and motorised zoom lens (12,5 to 75 mm, f/1,2). TS2 image capture software is included. Optional VisionWorks®LS analysis software can be ordered separately for use on a separate computer.

A FirstLight UV illuminator or Benchtop UV transilluminator needs to be added for a fully functional system.

Model	GelDoc-It®TS2 310 (motorised)
Camera	12-bit Gel 310 CCD
Camera resolution (pixels)	2 megapixel, 1600×1200
CCD bit depth	12-bit
File bit depth (A/D)	16-bit
W×D×H (mm)	445×370×875
Zoom lens	Motorised (f/1,2) 12,5 - 75 mm

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Description	Pk	Cat. No.
GelDoc-It®TS2 310 with motorised zoom	1	**733-2049**

Description	Pk	Cat. No.
Accessories		
Digital thermal printer, UP-D897	1	**733-2033**
Thermal paper, high gloss, for UP-D897 and UP-895 printers (200 images per roll)	5 Roll	**733-2032**
VisionWorks®LS image acquisition, enhancement and 1D analysis software, single copy	1	**733-2035**
VisionWorks®LS image acquisition, enhancement and 1D analysis software, network	1	**733-2036**
VisionWorks®LS image acquisition, enhancement and 1D analysis software, second copy	1	**733-2037**
Automated BioLite™ unit for *in vivo* studies, with transilluminator fibre optics, for darkroom with top access port*	1	**733-2349**

* No excitation filters are included with the BioLite unit. Please ask for details of the available choice.

Gel documentation system, Syngene InGenius^3

Syngene InGenius^3 is an ideal choice for low budget gel documentation and analysis for fluorescence applications. It features a compact darkroom which has a sliding front door and an internal LED white light.

InGenius^3 has a 3 megapixel camera and can produce images with 12 or 16 bit image depth.

- High resolution CCD digital camera with manual zoom 6,5 - 39 (f/1,4)
- Captured images can be stored and enhanced using the software supplied
- Images can be saved onto PC via Ethernet or USB interface in JPEG, TIFF, or BMP formats
- Darkroom with large access door and safety interlocks, built-in white light and filter drawer for interchangeable filters
- Maximum sample size 200×200 mm

Delivery information: The system includes a 3 megapixel CCD camera, manual zoom lens and manual filter drawer (includes a UV filter), and epi-LED white lights. GeneSys image capture and manipulation software and 2× GeneTools analysis software are also supplied. An external PC, optimised for Windows 7 Pro is required (not supplied). A UV transilluminator is also required (not supplied). Please contact your local VWR office for full details on the options and accessories available for this system.

Description	Pk	Cat. No.
InGenius^3 gel documentation system	1	**733-2313**

Description	Pk	Cat. No.
Accessories		
Thermal printer, digital	1	**730-1260**
Thermal paper, matt	1 Roll	**730-2892**
Thermal paper, glossy	1 Roll	**733-2000**

Gel documentation system, Syngene U:Genius^3

Designed for quick and easy gel imaging with no set up and no external computer, the Syngene U:Genius^3 is a complete 1D imaging system. The integral computer, running embedded Windows™, controls the system and the intuitive touch screen ensures that anyone can use a U:Genius^3 with virtually no previous experience of gel imaging. Camera and exposure control is via the touch screen. It is also possible to make image enhancements and annotations via the touch screen.

An external computer is not required, however network connectivity is possible for transfer of images directly to a PC.

- High resolution CCD camera
- Camera and exposure controlled by 8" colour touch screen display
- Images can be saved on memory stick or in internal memory in TIFF, BMP or JPEG format - the system has three USB ports and an Ethernet networking connection
- Compact darkroom (460×380 mm) with large access door and safety interlocks, and built-in white light and filter drawer for interchangeable filters
- Maximum gel size 200×200 mm

Delivery information: Each system comprises a 3 megapixel CCD camera, manual or motorised zoom lens, UV filter, compact darkroom with access door, epi-LED white light. GeneSys image capture and manipulation software along with GeneTools analysis software is also supplied. Transilluminator and white light converter are not supplied as standard, but can be ordered separately.

Model	U:Genius^3	U:Genius^3-EZ
Camera	CCD, 12/16-bit, 4096/65536 greyscales	
Camera resolution (pixels)	3 megapixels	
Dynamic range	3,6 - 4,8	
W×D×H (mm)	465×390×620	
Zoom lens	Manual (f/1,4)	Motorised (f/1,4)

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Description	Pk	Cat. No.
U:Genius^3 gel documentation system	1	**733-2353**
U:Genius^3-EZ gel documentation system with motorised zoom	1	**733-2352**

Description	Pk	Cat. No.
Accessories		
Thermal printer, digital	1	**730-1260**
Visible light converter (UV to white light)	1	**730-1395**

Please contact your local VWR office for full details on the options and accessories available for this system.

Gel documentation system, Syngene G:BOX-F^3

The Syngene G:BOX-F^3 gel imaging system is designed for general fluorescence applications, including DNA and protein analysis. The range of applications available can be extended by adding lighting modules*.

Driven from a database containing hundreds of application protocols, functional control of the G:BOX-F^3 is handled by the GeneSys automatic control software, although full manual control is also possible. It has a 3,8 megapixel camera, which gives high quality images with undetectable noise.

- CCD camera with 3,8 megapixel resolution and motor driven zoom
- Automated image capture, storage and enhancement via GeneSys control software (full manual control also available, if required)
- Images can be saved as JPEG, TIFF or BMP onto computer via Ethernet or USB interface connections
- Darkroom with large access door and safety interlocks has built-in white light and UV to white light conversion screen
- Maximum sample size 275×205 mm

The system comprises a 3,8 megapixel CCD camera, motor driven zoom lens, 7 position motor driven filter wheel, UV filter, darkroom with access door, and epi-LED white light. GeneSys image capture and manipulation software along with GeneTools analysis software is also supplied. Transilluminator, top silver cover and white light converter not supplied. An external computer is required for operation of the system.

Model	G:BOX-F^3
Camera	CCD, 12/16-bit, 4096/65536 greyscales
Camera resolution (pixels)	3,8 megapixel
Cooling	n/a
Dynamic range	3,6 - 4,8
W×D×H (mm)	570×430×850 (not including PC)
Zoom lens	Motorised (f/1,2)

Description	Pk	Cat. No.
G:BOX-F^3 gel documentation system, 3,8 MP	1	**733-2309**

Description	Pk	Cat. No.
Accessories		
Thermal printer, digital	1	**730-1260**

* The modular construction of the G:BOX-F^3 allows the choice of a range of lighting options for both epi- and trans-illumination light applications. Please contact your local VWR sales office for further information.

Gel documentation system, Syngene G:BOX Chemi XRQ

The Syngene G:BOX Chemi XRQ gel imaging system is designed for extended fluorescence applications and chemiluminescent Western blots.

The G:BOX Chemi XRQ offers high quantum efficiency (73% at 425 nm) and 4 megapixel images with enhanced cooling for longer exposure times. Functional control of the G:BOX Chemi XRQ is handled by the GeneSys automatic control software, although full manual control is also possible.

- Effective resolution up to 16 megapixels
- Motor driven lens (with feedback) and 7 position filter wheel (with UV filter to extend applications)
- Automated or manual control using GeneSys software
- Images can be saved as JPEG, TIFF or BMP onto computer via Ethernet or USB interface connections
- Built-in light gantries for LED epi-illumination options*
- Maximum viewing area 305×227 mm

Delivery information: Each system comprises a 4 megapixel 16-bit CCD camera, motor driven zoom f/1,2 lens (12,5 - 75 mm) with feedback, 7 position motor driven filter wheel with UV chemi filter, LED gantry rack and top darkroom cover. GeneSys image capture and manipulation software along with GeneTools analysis software is also supplied. Epi LED white lights are included* but no transilluminator or white light converter is supplied. An external computer is required for operation of the system.

Model	G:BOX Chemi XRQ
Camera	CCD, 16-bit, 65536 greyscales
Camera resolution (pixels)	4 megapixels

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Cooling	–57 °C
Dynamic range	5,1 - 0,32 OD
W×D×H (mm)	570×450×840
Zoom lens	Motorised (f/1,2) with feedback

Description	Pk	Cat. No.
G:BOX Chemi XRQ gel documentation system, 4 MP	1	**733-2350**

Description	Pk	Cat. No.
Accessories		
Thermal printer, digital	1	**730-1260**

*A range of lighting options are available for both epi- and transillumination applications. Please enquire for further details.

Gel documentation system, Syngene G:BOX Chemi XX6

The Syngene G:BOX Chemi XX6 gel documentation system offers optimum performance. Highly sensitive, it is designed for advanced chemiluminescent Western blots, multiplex gels, IR and routine imaging of fluorescent and visible gels and blots. The higher spatial resolution of this system makes it suitable for advanced applications, including 2D.

The G:BOX Chemi XX6 includes a super-high resolution, 6 megapixel camera with quantum efficiency >73% at 425 nm, giving outstanding sensitivity for chemiluminescence. Functional control of the G:BOX Chemi XT4 is handled by the GeneSys automatic control software, although full manual control is also possible.

- Effective resolution up to 18 megapixels
- Motor driven lens (with feedback) and 7 position filter wheel (with UV filter to extend applications)
- Automated or manual control using GeneSys software with autofocus
- Images can be saved as JPEG, TIFF or BMP onto computer via Ethernet or USB interface connections
- Fullly variable motor driven sample stage to accommodate large to small gel formats
- Built-in light gantries for LED Epi illumination options*
- Maximum viewing area 323×256 mm

Delivery information: Each system comprises a 6 megapixel 16-bit CCD camera, motor driven fixed lens f/1,4, motor driven sample stage, 7 position motor driven filter wheel with UV filter, and LED gantry rack. GeneSys image capture and manipulation software along with GeneTools analysis software is also supplied. Epi LED white lights and wiring for edge lighting are included* but no transilluminator or white light converter is supplied. An external computer is required for operation of the system.

Model	G:BOX Chemi XX6
Camera	CCD, 16-bit, 65536 greyscales
Camera resolution (pixels)	6 megapixels
Cooling	–57 °C
Dynamic range	5,1 - 0,16 µg
W×D×H (mm)	570×550×990
Zoom lens	Motorised (f/0,95) with autofocus

Description	Pk	Cat. No.
G:BOX Chemi XX6 gel documentation system, 6 MP	1	**733-2351**

Description	Pk	Cat. No.
Accessories		
Thermal printer, digital	1	**730-1260**

*A range of lighting options are available for both epi- and transillumination applications. Please enquire for further details.

Film, Amersham Hyperfilm™ ECL™
GE Healthcare

The emulsion of this double coated film provides improved clarity, giving superior contrast and band visibility in the detection of chemiluminescent signals. Hyperfilm™ ECL™ can be processed in automatic processors or manually using most common film developers and fixers.

- Superior contrast and improved band visibility
- High quality images - the risk of visible artifacts (e.g. plastic wrap marks) is reduced due to improved anti-static coating
- Easier reading of images without compromising on sensitivity due to the clear, colourless base
- Suitable for use with all blue and green light chemiluminescent systems and validated for use with Amersham ECL™ and CDP-Star™

Packaging: Packs contain 50 or 100 sheets, supplied in silver plastic coated bags with black lining.

Dimensions (mm)	Pk	Cat. No.
127×178	50	**28-9068-35**
180×240	50	**28-9068-36**
180×240	100	**28-9068-37**
203×254	50	**28-9068-38**
203×254	100	**28-9068-39**

Autoradiography cassettes, Amersham Hypercassette™
GE Healthcare

Robust and chip-proof autoradiography cassettes for light-tight exposures at temperatures down to –70 °C.

- Maximum contact between film and sample
- Non-porous pad gives a wipe clean surface, ensuring minimum contamination

Other sizes available on request. Please enquire for further information.

Dimensions (mm)	Description	Pk	Cat. No.
127×178	Hypercassette™, neutral	1	**RPN11648**
180×240	Hypercassette™, neutral	1	**RPN11642**
200×400	Hypercassette™, neutral	1	**RPN11647**
203×254	Hypercassette™, neutral	1	**RPN11649**
240×300	Hypercassette™, neutral	1	**RPN11643**
300×400	Hypercassette™, neutral	1	**RPN11644**
350×430	Hypercassette™, neutral	1	**RPN11645**

Film, Amersham Hyperfilm™ MP
GE Healthcare

Amersham Hyperfilm™ MP is a high performance, multipurpose film with an improved emulsion to provide enhanced performance and clearer background. Amersham Hyperfilm™ MP can be processed in automatic processors or manually using most common X-ray film developers and fixers.

- Superior contrast and improved band visibility
- Publication-quality images - the risk of visible artifacts (e.g. plastic wrap marks) is reduced due to the improved anti-static coating
- Easier reading of images without compromising on sensitivity due to the clear, colourless base
- Improved detection of lower concentration targets through longer exposure times without increasing the background
- Increased flexibility - suitable for detection of ^{3}H, ^{14}C, ^{3}P, ^{33}P, ^{35}S, ^{125}I in direct or indirect autoradiography

Packaging: Supplied in packs of 50 or 100 sheets. Also available in a sealed light-tight envelope for maximum protection and ease of use.

Dimensions (mm)	Pk	Cat. No.
127×178	50	**28-9068-42**
180×240*	50	**28-9068-50**
180×240	50	**28-9068-43**
180×240	100	**28-9068-44**
203×254	50	**28-9068-45**
203×254	100	**28-9068-46**

*enveloped

Film, BioMax® XAR
Kodak

Kodak BioMax® XAR Film is an autoradiography film for use with all commonly used isotopes and chemiluminescence labels. The film is coated with emulsion on both sides of a clear base, and is suitable for both direct autoradiography and exposures made with intensifying screens, including BioMax® intensifying screens.

- Suitable for both manual and automated processing

Darkroom handling: The film should be handled under safelight conditions using a Kodak Safelight with a GBX-2 Filter, GBX-2 equipped with a 7,5 or 15 W bulb only (other safelight filters or higher wattage bulbs will result in increased background fog and/or unwanted image exposure). The safelight should be positioned at least 120 cm from the film at all times. Minimise the length of time that the film is exposed to safelight conditions.

Dimensions (mm)	Pk	Cat. No.
BioMax® XAR film (alternate interleaved sheets)		
130×180	50	**730-3216**
180×240	50	**730-3234**
203×244	50	**730-3215**
240×300	50	**730-3204**
300×400	50	**730-3208**
350×430	50	**730-3217**
BioMax® XAR film in readypack (individually wrapped sheets)		
130×180	50	**730-3221**
203×254	50	**730-3218**
350×430	50	**730-3219**

Film, BioMax® MS
Kodak

BioMax® MS film is a high performance all-purpose, maximum sensitivity autoradiography film. When used with the BioMax® TranScreen HE intensifying screen it delivers four to eight times greater sensitivity in the detection of ^{32}P when compared to other autoradiography film and intensifying screen combinations. This film/screen combination is ideal for detection of Northern, Southern and Dot Blotting applications, particularly when detection of low intensity samples or exposure time reduction is required.

- General purpose autoradiography film
- Particularly recommended for ^{32}P-labelled samples
- Suitable for manual or automated processing

Dimensions (mm)	Pk	Cat. No.
BioMax® MS-1 film (non-interleaved sheets)		
130×180	50	**730-3200**
180×240	50	**730-3230**
200×250	50	**730-3231**
240×300	50	**730-3232**
300×400	50	**730-3229**
350×430	50	**732-1500**
BioMax® MS-2 film in readypack (individually wrapped sheets)		
130×180	50	**730-3224**
203×254	50	**730-3233**
350×430	50	**730-3223**

Film, X-OMAT LS
Kodak

Kodak X-OMAT LS is an economical, blue-tinted film for when the maximum performance of BioMax® MR, BioMax® MS, or X-OMAT AR film is not required. X-OMAT LS film is suitable for use with all commonly used radioisotopes and chemiluminescent probes. However, the film provides significantly less detection sensitivity than the BioMax® autoradiography films, resulting in longer exposure times.

- Economical
- Suitable for both manual and automated processing

Darkroom handling: X-OMAT LS Film should be handled under safelight conditions using a Kodak Safelight with GBX-2 filter equipped with a 7,5 or 15 watt bulb only (other safelight filters or higher wattage bulbs will result in increased background fog and/or unwanted image exposure). The safelight should be positioned at least 120 cm from the film at all times. Minimise the length of time that the film is exposed to safelight conditions.

Packaging: Non-interleaved sheets, 50 per box

Dimensions (mm)	Pk	Cat. No.
130×180	50	**730-3212**
180×240	50	**730-3237**
200×250	50	**730-3236**
350×430	50	**730-3247**

Film for chemiluminescent imaging, BioMax® Light

Kodak

BioMax® Light is a double emulsion film that provides maximum clarity and sensitivity for detection of chemiluminescent-labelled samples. BioMax® Light produces the highest signal-to-noise ratio of any Kodak film for detection of chemiluminescence. This film performs well with all brands of chemiluminescent kits. BioMax® Light film is suitable for direct and intensifying screen exposures with commonly used isotopes, though it provides lower sensitivity resulting in longer exposure times compared to BioMax® MS, and X-OMAT AR films for radioisotope detection.

- Suitable for both manual and automated processing

Darkroom handling: The film should be handled under safelight conditions using a Kodak Safelight with GBX-2 filter equipped with a 7.5 or 15 W bulb only (other safelight filters or higher wattage bulbs will result in increased background fog and/or unwanted image exposure). The Safelight should be positioned 120 cm from the film at all times. Minimise the length of time that the film is exposed to safelight conditions.

Dimensions (mm)	Pk	Cat. No.
BioMax® light film (non-interleaved sheets)		
130×180	50	**730-3238**
180×240	50	**730-3227**
203×254	50	**730-3225**
240×300	50	**730-3211**
BioMax® light film in readypack (individually wrapped sheets)		
130×180	50	**730-3226**
203×254	50	**730-3244**

Film, BioMax® MR

Kodak

BioMax® MR is a single emulsion film that provides maximum resolution and sensitivity for detection of ^{35}S, ^{32}P,and ^{14}C labelled samples. An emulsion coated on a single side of a clear support produces maximum resolution and background clarity in the detection of all labels, making overall reading of sequencing gels easier and more accurate. BioMax® MR film also provides maximum resolution for direct detection of ^{32}P labelled samples, delivering sharper, crisper band responses that allow viewing in exceptionally fine detail. BioMax® MR film is also suitable for detection of most chemiluminescent labelled samples. Though not as sensitive as BioMax® MS, BioMax® MR film offers maximum resolution and is the recommended film for Western chemiluminescent application where exposures are relatively short.

- Maximum resolution and background clarity for easy and accurate reading of sequencing gels
- Recommended for ^{35}S, ^{32}P and ^{14}C labelled samples
- T-Grain emulsion technology enhances sensitivity by two to four times that of other films, giving greater detection for low intensity bands
- Suitable for manual or automated processing

Packaging: Non-interleaved sheets, 50 per box

Dimensions (mm)	Pk	Cat. No.
BioMax® MR-1 film (non-interleaved sheets)		
130×180	50	**730-1106**
180×240	50	**730-3241**
180×430	50	**730-3242**
203×254	50	**730-3239**
240×300	50	**730-2543**
330×610	50	**730-3245**
350×430	50	**730-3240**

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Microplate readers, Multiskan™ GO

Thermo Scientific

The Multiskan™ GO is a compact, reliable, absorbance spectrophotometer microplate reader available in two instrument models, with or without a cuvette port. The instrument can be operated as a stand-alone unit using straightforward internal software or by using Thermo Scientific SkanIt™ software for PC control. Both the internal and PC software are available in multiple language versions, including English, French, German, Spanish, Portuguese, Russian, Chinese and Japanese. A broad wavelength range, including UV, makes this microplate reader ideal for a wide range of photometric applications, such as nucleic acid and protein analysis, enzyme assays, cytotoxicity and cell proliferation assays as well as apoptosis assays. The cuvette option provides a quick and easy way of measuring when there are only a couple of samples to be analysed.

The SkanIt™ software package supplied with the instruments provides easy assay optimisation, flexible data handling and convenient report formatting. The software also has a special remote control interface, which enables easy integration with automated systems.

- Freely selectable wavelengths by the monochromator for the demands of various assays
- Fast plate measurement and a full spectrum of a sample in less than 10 seconds
- Both microplate and cuvette reading capability available
- Shaking and incubation up to 45 °C for temperature-critical applications
- Robotic compatibility for high throughput environments

Delivery information: Supplied with SkanIt™ software.

µDrop™ Plate

µDrop™ Plate is a quick and easy tool for DNA and RNA assays using photometric measurement and sample volumes down to 2 µl. The fixed light path of the µDrop™ Plate allows direct calculation of the nucleic acid concentrations of the samples.

- dsDNA detection range from a few micrograms to a few milligrams per millilitre
- Sixteen sample positions for quick and easy measurement of sample volumes down to 2 µl
- Compatible with an eight channel pipette for easy sample addition
- Quick and easy to wipe off the samples in serial measurements
- Format flexibility with measurement slot for a rectangular cuvette (10 mm path length)
- Compatible with Multiskan™ GO and Varioskan™ Flash

Model	Multiskan™ GO without cuvette port	Multiskan™ GO with cuvette port
Light source	Xenon flash lamp	
Wavelength range (nm)	200 - 1000	
Wavelength selection	Monochromator	
Bandwidth	<2,5 nm	
Plate types	96- and 384-well	
Absorbance range	0 - 4 Abs	
Resolution	1 nm, 0,0001 Abs	
Absorbance accuracy	±1,0% or ±0,003 Abs (0 - 2 Abs), ±2,0% (2 - 2,5 Abs)	
Precision	SD <0,003 Abs or CV <0,5% (Precision mode) SD <0,003 Abs or CV <1,0% (Fast mode)	SD <0,003 Abs or CV <0,5% (cuvettes)
Cuvette type (mm)	-	W×D×H: 12,5×12,5×(44 - 58)
Linearity (96-well plate)	0 - 2,5 Abs, ±2% at 450 nm	0 - 2,5 Abs, ±2% at 450 nm (also cuvette with beam window ≥2 mm)
Measurement time (96-well plate)	6 s (from A1 back to A1)	
Measurement time (384-well plate)	10 s (from A1 back to A1)	
Display	4,5 inch colour display	
Scan speed	200 - 1000 nm in 10 seconds	
Software	Internal software or PC control with SkanIt™ software	
Shaking	Linear	Linear (plates)
Incubation range (°C)	From ambient +2...45	
Interfaces	USB for computer connection USB memory stick for data export USB for external printer (HP PCL5 type)	
W×D×H (mm)	285×430×260	
Weight (kg)	10,8	

Description	Pk	Cat. No.
Multiskan™ GO without cuvette port	1	**736-0559**
Multiskan™ GO with cuvette port	1	**736-0560**

Description	Pk	Cat. No.
Accessories		
µDrop™ Plate for up 16 samples, volumes 2 - 10µL, for use with microplate readers Multiskan™ GO and Varioskan™ Flash	1	**736-0754**

Microplate readers, Multiskan™ FC

Thermo Scientific

The Multiskan™ FC is a compact, reliable and robust microplate photometer capable of reading 96-well plates for a wide variety of applications. It provides fast and accurate measurement with excellent linearity. One model in the range is fitted with an incubator providing temperature control up to 50 °C and the capacity to read 384-well plates. It takes only 6 seconds to measure a 96-well plate and 12 seconds to measure a 384-well plate. The wavelength range of 340 to 850 nm makes the Multiskan™ FC suited to applications from enzyme kinetics to Lowry assays.

- Easy to use multi-language interface with large colour screen
- Use either as a stand-alone instrument using internal software or under PC control with SkanIt™ software
- Small footprint saves laboratory space and facilitates automated procedures
- USB port for easy data transfer
- Reliable day-to-day and year-on-year performance
- Robotic compatibility for high-throughput environments

Delivery information: Supplied complete with three standard filters - 405, 450, and 620 nm and SkanIt™ software. For details of alternative filters please contact VWR or see the VWR website.

Model	Multiskan™ FC	Multiskan™ FC with incubator
Light source	Quartz-halogen lamp 6 V/10 W	Quartz-halogen lamp 6 V/10 W
Wavelength range (nm)	340 - 850	
Filter type	8-position filter wheel	
Filters	340, 375, 405*, 414, 450*, 492, 520, 530, 540, 550, 560, 570, 595, 620*, 630, 650, 690, 740, 750, 820 nm filters (*standard filters)	
Half bandwidth of filters	3 - 9 nm	
Plate types	96-well	96- and 384-well
Absorbance range	0 - 6 Abs	
Resolution	0,001 Abs	
Absorbance accuracy	±1% (0,3 - 3 Abs) at 405 nm ±2% (3 - 4 Abs) at 405 nm	
Precision	CV =0,2% (0,3 - 3 Abs) at 405 nm; CV =1,0% (3 - 4 Abs) at 405 nm in normal mode	
Linearity (96-well plate) with normal mode	0 - 4 Abs, ±2%	
Linearity (384-well plate) with normal mode	-	0 - 3 Abs, ±2%
Measurement time (96-well plate)	<6 s	
Measurement time (384-well plate)	-	<12 s
Display	High contrast colour display (480×272 dots)	
Software	Internal software or PC control with SkanIt™ software	
Shaking	Linear shaking, 3 speeds	
Optional incubator	-	Included
Temperature range (°C)		Ambient +4...50
Interfaces	USB for computer connection USB memory stick for data export USB for external printer (HP PCL5 type)	
W×D×H (mm)	290×400×210	

Description	Pk	Cat. No.
Multiskan™ FC with integral shaker	1	**736-0355**
Multiskan™ FC with integral shaker and incubator	1	**736-0356**

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Microplate reader, UV/Vis absorbance, SPECTROstar *Nano*

The SPECTROstar *Nano* can read assays at various volumes in both cuvettes and all common microplate formats from 6- to 1536-wells. In addition, volumes as low as 2 µl can be read using the optional LVis Plate allowing for up to 16 samples to be collected in one reading. Using the same UV/Vis spectrometer as the BMG LABTECH Omega series, wavelengths are user selectable from a 220 to 1000 nm range. The SPECTROstar *Nano* can also read both multiple wavelengths and definable spectra in under 1s per well making it the perfect solution to meet the requirements of research laboratories where rapid, absorbance based measurements are routine and development work is also required.

The one button, easy to operate 'Quick Run' feature is ideal for ELISA, RNA, DNA, protein, cell growth and enzyme assays and sample identity data can be rapidly input from an Excel file or using an optional, external barcode reader. Results are analysed using the intuitive MARS software (FDA 21 CFR part 11 compliant) and data can be quickly exported either in an Excel or Text format as required.

- Captures a spectrum from 220 to 1000 nm in less than 1 sec/well
- Selectable spectral resolution 1 to 10 nm
- Cuvette port for standard 10 mm path length cuvettes, TrayCell compatible
- Low volume 2 µl measurements for DNA, RNA, protein assays with optional LVis Plates
- Well scanning, kinetic and endpoint measurements
- Optional gas vent for maintaining an inert atmosphere – ideal for sensitive samples
- Optional 1536-well microplate capability

Delivery information: Supplied with Windows™ based control software and MARS data reduction software.

LVis Plates

The LVis Plates are a low volume and cuvette-based measurement microplates that incorporate performance testing features. The microplates are equipped with sixteen low volume positions of 2 µl. Additionally, with horizontal cuvette placement, it is possible to read standard rectangular cuvettes. The LVis Plate 1 has various optical density (OD) filters for checking of correct instrument function, including absorbance intensity and wavelength accuracy. The LVis Plate 2 is a sixteen position blank plate and has no reference filters.

Model	SPECTROstar *Nano*
Light source	High energy xenon flash lamp
Measuring modes	Endpoint and kinetic measurements Well scanning
Measuring principle	Absorbance UV/Vis
Detector	CCD based spectrometer
Wavelength range (nm)	220 - 1000
Spectral resolution (nm)	1, 2, 5, 10 selectable
Plate types	6- to 384-well plates, user definable. Optional extra required for 1536-well plates
Absorbance range	0 - 4 OD
Absorbance accuracy	<1% at 2 OD
Precision	<0,5% at 1 OD; <0,8% at 2 OD
Cuvette type (mm)	Single cuvette, standard 10 mm, microcuvette or TrayCell Beam height 8,5 mm
Measurement time	Full spectrum from 220 to 1000 nm in less than 1 sec/well
Software	Multi-user package including reader control and MARS data analysis software, FDA 21 CFR part 11 compliant
Shaking	Linear, orbital and double-orbital with user-definable speed and time
Incubation range (°C)	Ambient +3...45
Interfaces	USB 2.0
W×D×H (mm)	360×500×160
Weight (kg)	10

Description	Pk	Cat. No.
SPECTROstar *Nano* absorbance microplate reader	1	**736-0598**

Description	Pk	Cat. No.
Accessories		
1536-well plate read option	1	**736-0581**
Purge gas vent for the SPECTROstar *Nano*	1	**736-0582**
Low volume LVis Plate 1, containing standard reference filters, 16×2 µl sample positions	1	**736-0589**
Low volume LVis Plate 2, blank, 16×2 µl sample positions	1	**736-0590**

Microplate reader, UV/Vis absorbance, SPECTROstar Omega

A UV/Vis, spectrometer based microplate reader, which provides spectral data acquisition quicker than traditional scanning technology, as well as discrete wavelength detection. The unit will fulfil the high sensitivity and precision assay needs for academic and pharmaceutical research laboratories.

The unit can be configured with on-board 'smart' injectors and has a temperature controlled incubation chamber option to extend the temperature to 60 °C. For higher throughput the SPECTROstar Omega can be integrated into most types of robotic systems from a variety of manufacturers or used with a 50-plate stacker with an optional, integrated barcode reader.

- Captures a spectrum from 220 to 1000 nm in less than 1 sec/well
- Selectable spectral resolution from 1 to 10 nm
- Well scanning, kinetic and endpoint measurements
- Optional O_2/CO_2 atmospheric control unit (ACU) or purge vent - ideal for cell based assays
- FDA 21 CFR part 11 compliant software

Ordering information: The SPECTROstar Omega absorbance (only) microplate reader is entirely upgradeable to a multi-detection microplate reader, please contact your local VWR sales office for details.

Delivery information: Supplied with Windows™ based control software and MARS data reduction software.

Model	SPECTROstar Omega
Light source	High energy xenon flash lamp
Measuring modes	Endpoint and kinetic measurements Well scanning
Measuring principle	Absorbance UV/Vis
Detector	CCD based spectrometer
Wavelength range (nm)	220 - 1000
Spectral resolution (nm)	1, 2, 5, 10 selectable
Plate types	6- to 1536-well plates, user-definable
Absorbance range	0 - 4 OD
Absorbance accuracy	<1% at 2 OD
Precision	<0,5% at 1 OD; <0,8% at 2 OD
Measurement time	Full spectrum from 220 to 1000 nm in less than 1 sec/well
Software	Multi-user package including reader control and MARS data analysis software, FDA 21 CFR part 11 compliant
Dispensers	Up to 2 optional built-in 'smart' injectors; injection at measurement position (6- to 384-well); up to 4 individual injection events/well; reagent backflushing
Dispensing volume range	3 - 350 µl for each individual well
Dispensing speed	Variable injection speed 100 to 420 µl/s
Shaking	Linear, orbital and double-orbital with user-definable speed and time
Incubation range (°C)	Ambient +5...45 (up to 60 as an option)
Interfaces	USB 2.0
W×D×H (mm)	440×480×300
Weight (kg)	28

Description	Pk	Cat. No.
SPECTROstar Omega computer-controlled absorbance reader	1	**736-0586**

Description	Pk	Cat. No.
Accessories		
Reagent injector for 6- to 384-well plate formats - up to 2 onboard injectors can be installed. (Omega series only)	1	**736-0587**
60 °C incubation option	1	**736-0588**
Low volume LVis Plate 1, containing standard reference filters, 16×2 µl sample positions	1	**736-0589**
Low volume LVis Plate 2, blank, 16×2 µl sample positions	1	**736-0590**
O_2/CO_2 atmospheric control unit	1	**736-0594**

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Microplate readers, Vis absorbance, Biochrom EZ Read 400 ELISA and Research

The Biochrom **EZ Read 400 ELISA** is a PC-controlled, single channel filter-based absorbance reader. Supplied with four filters for the most common ELISA substrates. It is robust and quick to set up, making it suitable for multi-level users. Calibration is performed prior to each reading ensuring accurate readings and results are exported to analysis software.

The Biochrom **EZ Read 400 Research** is supplied with filter sets for ELISA, protein assays and cell biology assays.

The readers come with Galapagos PC software for instrument control and data analysis.

Featuring 'click and drag' functionality, Galapagos software enables configuration of plate layouts, multiple assays per plate and multiple plates per analysis.

- Simple to use microplate photometer for 96-well plates
- Single or dual wavelength measurement
- Timed interval reading: Ideal for kinetic assays
- Endpoint measurements

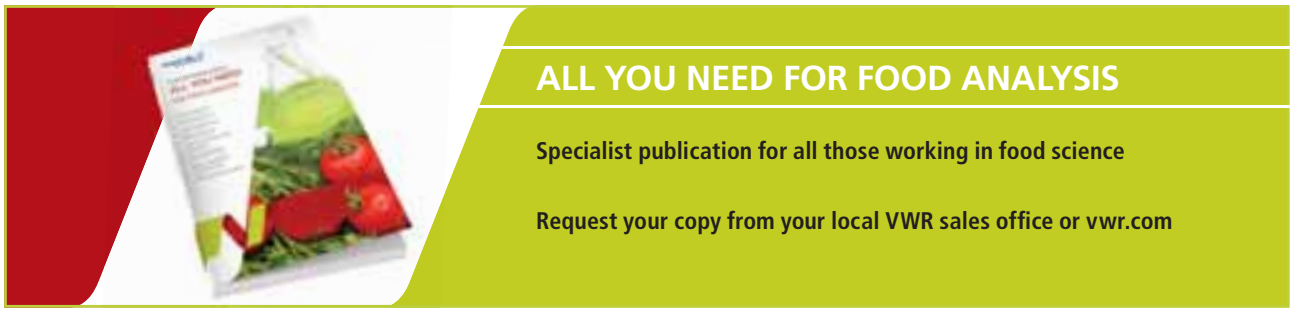
A third option is available from VWR - the Biochrom EZ Read Flexi which allows the user to configure the system by including the ELISA filter set and choice of 4 additional filters in the range 400 - 750 nm. For full details of additional filters, options and accessories including QC plate for instrument validation, ADAP 2.0 Expert software and spare lamps, please contact VWR.

Supplied with Galapagos PC software (compatible with Windows 7 and 8, and XP onwards), wavelength filters (as specified below), manual, power cord and USB cable. Additional filters are available from 400 to 750 nm, please contact VWR for details.

Model	Biochrom EZ Read 400
Light source	Tungsten halogen lamp
Measuring modes	Endpoint and kinetic measurements, multi-wavelength
Measuring principle	Absorbance in the visible with filters
Detector	Silicon photodiode
Wavelength range (nm)	400 - 750 (with accessory filters)
Plate types	Flat, round and V-bottom 96-well plates with standard ANSI SBS footprint
Absorbance range	0,000 to 3,300 OD
Resolution	0,0001 OD
Absorbance accuracy	±0,5% at 1 OD at 450 nm
Precision	Reproducibility: <±0,25% at 1 OD at 450 nm
Linearity	<±0,25% and ±0,0025 OD from 0,1 to 2,5 OD at 492 nm
Measurement time (96-well plate)	25 seconds, single wavelength
Software	Galapagos PC software
Interfaces	USB 2.0
W×D×H (mm)	360×515×315
Weight (kg)	6,6

Description	Pk	Cat. No.
Biochrom EZ Read 400 ELISA computer-controlled absorbance reader with Galapagos EZ Read PC Software and ELISA filter set*	1	**736-0859**
Biochrom EZ Read 400 Research computer-controlled absorbance reader with Galapagos EZ Read PC Software and filter sets for ELISA assays, protein assays** and cell biology assays***	1	**736-0860**

***ELISA filter set**: 405 nm (PNPP, ABTS); 492 nm (OPD); 450 nm (Slow,Turbo and Ultra TMB); 650 nm (Ref wavelength)
****Protein assay filter set:** 595 nm (Bradford); 562 nm (BCA); 650 nm (Lowry)
*****Cell biology assay filter set:** 570 nm (MTT); 492 nm (XTT); 620 nm (Turbidity cell counting)



Microplate readers, Vis and UV/Vis absorbance, Biochrom EZ Read LED

The Biochrom EZ Read LED is a PC-controlled, single channel, LED-based absorbance reader. The novel LED technology means that lamps rarely need changing compared to traditional halogen lamps.

Supplied with LEDs for the most common ELISA substrates. It is robust and quick to set up, making it suitable for multi-level users. The EZ Read LED UV version can read down to 340 nm, making it ideal for NADH/NADPH assays. Calibration is performed prior to each reading ensuring accurate readings.

The readers come with Galapagos PC software for instrument control and data analysis. Featuring 'click and drag' functionality, Galapagos software enables configuration of plate layouts, multiple assays per plate and multiple plates per analysis.

- Fast plate reading: 96-well plate measurement in 5 seconds – suitable for high throughput applications
- Single or multiple wavelength measurement
- Timed interval reading: Ideal for kinetic assays
- Endpoint measurements
- Four shaking modes: For complete mixing of solutions

Ordering information: For full details of additional LEDs and spare lamps, please contact your local VWR sales office.

Delivery information: Supplied with Galapagos PC software on CD and USB stick (compatible with Windows® 7 and 8, and XP onwards), LEDs (EZ Read LED: 405, 450, 492, 620 nm; EZ Read LED UV: 340, 405, 450, 492, 620 nm), manual, power cord and USB cable. Additional LEDs are available from 400 to 900 nm, please contact VWR for details.

Model	Biochrom EZ Read LED	Biochrom EZ Read LED UV
Light source	LED	
Measuring modes	Endpoint and kinetic measurements, multi-wavelength	
Measuring principle	Absorbance in the visible LED selection	Absorbance near UV/Vis LED selection
Detector	Silicon photodiode (8)	
Wavelength range (nm)	400 - 620 (LEDs at 405, 450, 492, 620 nm)	340 - 620 (LEDs at 340, 405, 450, 492, 620 nm)
Plate types	Flat, round and V-bottom 96-well plates with standard ANSI SBS footprint	
Absorbance range	0,000 – 4,0 OD	
Resolution	0,0001 OD	
Absorbance accuracy	Less than or equal to 1% and 0,005 up to 3,5 OD at any wavelength	
Precision	Reproducibility: 0,5% and 0,005 OD up to 3,5 OD at any wavelength	
Linearity	0,5% and 0,005 OD up to 3,5 OD at any wavelength	
Measurement time (96-well plate)	5 seconds, single wavelength	
Software	Galapagos PC software	
Shaking	4 user-selectable modes	
Interfaces	USB 2.0	
W×D×H (mm)	360×515×315	
Weight (kg)	12,4	

Description	Pk	Cat. No.
Biochrom EZ Read LED computer-controlled absorbance reader with Galapagos PC software and four LEDs	1	**736-0861**
Biochrom EZ Read LED UV computer-controlled absorbance reader with Galapagos PC software and five LEDs	1	**736-0862**

ELISA LED set: 405 nm (PNPP, ABTS); 492 nm (OPD); 450 nm (Slow, Turbo and Ultra TMB); 620 nm (Ref wavelength)

Microplate readers, UV/Vis absorbance, Biochrom EZ Read 2000

The Biochrom EZ Read 2000 is a PC-controlled microplate reader, which supports multiple plate formats and is capable of measuring at any wavelength in 1 nm increments between 340 and 800 nm. The monochromator-based system allows wave scanning and multiple measurements at different wavelengths in the same well - important for contamination detection, sample purity analysis, optimal peak absorbance detection and product formation studies. Automatic calibration ensures accurate readings.

Applications include ELISAs, enzyme immunoassays, total protein quantitation (BCA, Lowry, Bradford), cell proliferation, and cell survival assays, plus cell based assays where shaking is required to keep cells in suspension, enzyme kinetic assays, assays requiring wave scans or spectral scans, and assays measuring the changes in absorbance of NADH at 340 nm.

The readers come with Galapagos PC software for instrument control and data analysis. Featuring 'click and drag' functionality, Galapagos software enables configuration of plate layouts, multiple assays per plate and multiple plates per analysis.

- Multiple plate formats: 12-, 24-, 48- and 96-well plates
- Flexible wavelength selection: Ideal for a variety of assays
- Single or dual wavelength measurement
- Timed interval reading: Ideal for kinetic assays
- Linear shaking in four modes
- Data analysis of endpoint measurements with Galapagos software package

Ordering information: For full details of options and accessories including QC plate for instrument validation and spare lamps, please contact your local VWR sales office.

Delivery information: Supplied with Galapagos PC software (compatible with Windows® 7 and 8, and XP onwards), manual, power cord and USB cable.

Model	Biochrom EZ Read 2000
Light source	30 W Tungsten halogen lamp
Measuring modes	Endpoint, kinetic measurements, well scanning

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Measuring principle	Absorbance UV/Vis
Detector	2 silicon diodes: 1 for measurement, 1 for reference
Wavelength range (nm)	340 - 800
Bandwidth	3 nm
Plate types	12-, 24-, 48- and 96-well plates with standard ANSI SBS footprint
Absorbance range	0,000 - 3,200 OD
Absorbance accuracy	±0,5% and 0,005 OD from 0,100 to 1,000 OD at 450 nm; ±1,0% and 0,010 OD from 1,000 to 2,000 OD at 450 nm
Precision	Reproducibility: ±0,8% and 0,005 OD from 0,100 to 2,000 OD at 450 nm
Linearity	±0,5% and 0,005 OD from 0,100 to 1,000 OD at 492 nm; ±1,0% and 0,010 OD from 1,000 to 2,000 OD at 492 nm
Measurement time (96-well plate)	35 seconds
Software	Galapagos PC software
Shaking	Linear: 4 user-selectable modes
Interfaces	USB 2.0
W×D×H (mm)	360x515x315
Weight (kg)	10,6

Description	Pk	Cat. No.
Biochrom EZ Read 2000 computer-controlled absorbance reader with Galapagos PC software	1	**736-0863**

Microplate reader, multi-mode, POLARstar Omega

Multi-mode with additional fluorescence polarisation and simultaneous dual emission detection

The POLARstar Omega delivers the ideal combination of performance and flexibility for life science and R&D applications, with its ability to capture fast, full UV/Vis absorbance spectra; to monitor rapid and slow kinetic reactions; and to perform FP, FRET, BRET, TR-FRET and AlphaScreen®/AlphaLISA® detection.

The unit can be configured with optional on-board 'smart' injectors, O_2/CO_2 atmospheric control unit and a temperature controlled incubation chamber with an option to extend the temperature range to 60 °C. For higher throughput the FLUOstar Omega can be integrated into most types of robotic systems from a variety of manufacturers or used with a 50-plate stacker with an optional, integrated barcode reader (please ask for details).

- Simultaneous dual emission detection halves read times
- Multi-fluorophor detection and full absorbance spectra
- Top and bottom plate reading and well scanning
- Reads 6- to 1536-well plates
- Two optional 'smart' injectors
- Precise temperature control and flexible multi-mode shaking

The POLARstar Omega is certified by Promega for the Dual Luciferase Reporter (DLR™) gene assay, certified by CisBio Bioassays for their HTRF® assay platform and has LanthaScreen™ certified plus status. It is also validated from Bellbrook Labs for Transcreener® in 96-well plate format.

Ordering information: Other variants of the POLARstar Omega are available, please contact your local VWR sales office for details.

Delivery information: Supplied with Windows™ based control software and MARS data reduction software.

Model	POLARstar Omega
Light source	High energy xenon flash lamp
Measuring modes	Top and bottom reading
Measuring principle	Fluorescence intensity (FI) Fluorescence polarisation (FP)/Anisotropy AlphaScreen®/AlphaLISA® Time-resolved Fluorescence (TRF) Luminescence (Flash and Glow) (LUM) UV/Vis Absorbance spectra (ABS)
Detector	Two matched side window photomultiplier tubes
Wavelength range (nm)	240 - 740 (240 - 900 option) 220 - 1000 for absorbance (ABS)
Spectral resolution (nm)	1, 2, 5, 10 selectable
Filter type	Excitation and emission filter wheel for 8 filters each
Plate types	6 to 1536-well plates
Dynamic range	8 Orders (LUM) 8 Orders (FI) 7 Orders (high-end TRF)
Absorbance range	0 - 4 OD
Sensitivity	FI: <0,2 fmol/well Fluorescein FP: <5 mP SD at 1 nM Fluorescein TRF: <30 amol/well Europium High-end TRF: <3 amol/well Europium LUM: 20 amol/well ATP DLReady™ certified AlphaScreen®: <100 amol* (384) (* limit of detection)

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Absorbance accuracy	<1% at 2 OD
Measurement time (96-well plate)	9 s (flying mode)
Measurement time (384-well plate)	16 s (flying mode)
Scan speed	<1 s/well for absorbance full spectrum capture
Dispensers	Up to 2 optional built-in 'smart' injectors; injection at measurement position (6 to 384-well); up to 4 individual injection events/well; reagent backflushing
Dispensing volume range	3 - 350 µl for each individual well with user-definable speed and time
Dispensing speed	Variable injection speed 100 to 420 µl/s
Shaking action	Linear, orbital and double-orbital with user-definable speed and time
Incubation range (°C)	Ambient +5...45 (up to 60 as an option)
Temperature stability (°C)	±0,2
Interfaces	USB 2.0
W×D×H (mm)	440×480×310
Weight (kg)	28

Description	Pk	Cat. No.
POLARstar Omega computer-controlled multi-mode reader (all modes)	1	**736-0583**

Description	Pk	Cat. No.
Accessories		
Reagent injector for 6- to 384-well plate formats - up to 2 onboard injectors can be installed. (Omega series only)	1	**736-0587**
60 °C incubation option	1	**736-0588**
Time resolved fluorescence (TRF) optic head	1	**736-0857**
Low volume LVis Plate 1, containing standard reference filters, 16×2 µl sample positions	1	**736-0589**
Low volume LVis Plate 2, blank, 16×2 µl sample positions	1	**736-0590**
O_2/CO_2 atmospheric control unit	1	**736-0594**

Microplate reader, multi-mode, FLUOstar Omega

Multi-mode reader with fluorescence, time resolved fluorescence, UV/Vis absorbance & luminescence

The FLUOstar Omega is a multi-detection modular and upgradeable microplate reader that incorporates Tandem Technology; a UV/Vis spectrometer for absorbance and ultra sensitive filter-based fluorescence detection. The UV/Vis spectrometer provides spectral data acquisition quicker than traditional scanning technology as well as discrete wavelength detection. The unit will fulfil the high sensitivity and precision assay needs for academic and pharmaceutical research laboratories with abilities that include collection of fast, full spectrum absorbance scans, monitoring of rapid kinetic reactions and performance of FRET and BRET detection.

The unit can be configured with optional on-board 'smart' injectors, O_2/CO_2 atmospheric control unit and a temperature controlled incubation chamber with an option to extend the temperature range to 60 °C. For higher throughput the FLUOstar Omega can be integrated into most types of robotic systems from a variety of manufacturers or used with a 50-plate stacker with an optional, integrated barcode reader.

- Multi-fluorophor detection and full absorbance spectra
- Top and bottom plate reading and well scanning
- Reads 6- to 1536-well plates
- Two optional 'smart' injectors
- Precise temperature control and flexible multi-mode shaking

The FLUOstar Omega is certified by Promega for the Dual Luciferase Reporter (DLReady™) gene assay, certified by Cisbio Bioassays for their HTRF® assay platform, and has LanthaScreen™ certified plus status.

Ordering information: Other variants of the FLUOstar Omega are available as well as a wide range of accessories, please contact your local VWR sales office for details.

Delivery information: Supplied with Windows™ based control software and MARS data reduction software.

Model	FLUOstar Omega
Light source	High energy xenon flash lamp
Measuring modes	Top and bottom reading
Measuring principle	Fluorescence intensity (FI) AlphaScreen®/AlphaLISA® Time-resolved Fluorescence (TRF) Luminescence (Flash and Glow) (LUM) UV/Vis Absorbance spectra (ABS)
Detector	Side window photomultiplier tubes
Wavelength range (nm)	240 - 740 (240 - 900 option) 220 - 1000 for absorbance (ABS)
Spectral resolution (nm)	1, 2, 5, 10 selectable
Filter type	Excitation and emission filter wheel for 8 filters each
Plate types	6- to 1536-well plates
Dynamic range	8 Orders (LUM) 8 Orders (FI) 7 Orders (high-end TRF)
Absorbance range	0 - 4 OD

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Sensitivity	FI: <0,2 fmol/well Fluorescein TRF: <30 amol/well Europium High-end TRF for Omega: <3 amol/well Europium LUM: 20 amol/well ATP DLReady™ certified AlphaScreen®: <100 amol (384)
Absorbance accuracy	<1% at 2 OD
Measurement time (96-well plate)	9 s (flying mode)
Measurement time (384-well plate)	16 s (flying mode)
Scan speed	<1 s/well for full spectrum capture
Dispensers	Up to 2 optional built-in 'smart' injectors; injection at measurement position (6- to 384-well); up to 4 individual injection events/ well; reagent backflushing
Dispensing volume range	3 - 350 µl for each individual well
Dispensing speed	Variable injection speed 100 to 420 µl/s
Shaking action	Linear, orbital and double-orbital with user-definable speed and time
Incubation range (°C)	Ambient +5...45 (up to 60 as an option)
Temperature stability (°C)	±0,2
Interfaces	USB 2.0
W×D×H (mm)	440×480×310
Weight (kg)	28

Description	Pk	Cat. No.
FLUOstar Omega computer-controlled, fluorescence, time resolved fluorescence, UV/Vis absorbance & luminescence reader	1	**736-0373**

Description	Pk	Cat. No.
Accessories		
Reagent injector for 6- to 384-well plate formats - up to 2 onboard injectors can be installed. (Omega series only)	1	**736-0587**
60 °C incubation option	1	**736-0588**
Time resolved fluorescence (TRF) optic head	1	**736-0857**
Low volume LVis Plate 1, containing standard reference filters, 16×2 µl sample positions	1	**736-0589**
Low volume LVis Plate 2, blank, 16×2 µl sample positions	1	**736-0590**
O_2/CO_2 atmospheric control unit	1	**736-0594**

Microplate dispensers, Multidrop® Combi

Thermo Scientific

Based on the proven and reliable Multidrop® range, the Multidrop® Combi provides high speed bulk reagent dispensing for biotech and pharmaceutical laboratories. The Multidrop® Combi is remarkably flexible, dispensing into plates ranging from 6-well to 1536-wells with automated dispensing height adjustment for low profile to deep well plates.

- Precise dispensing with peristaltic pump technology across a wide range: 0,5 to 2500 µl
- Reduced reagent costs with low volume dispensing and minimal dead volumes
- Simple operation with icon based graphic display
- High throughput operation with full robot compatibility
- The Multidrop® Combi equipped with the SMART feature counts the usage of the dispensing cassette and displays the calibration status

Model	Multidrop® Combi
Plate types	6-, 12-, 24-, 48-, 96-, 384-, 1536-well (plate height 5 - 50 mm)
Interfaces	RS232, USB
Dispensing volume range	0,5 - 2500 µl
Dispensing speed	96-well: 10 µl in 3 s, 20 µl in 4 s, 100 µl in 10 s; 384-well: 1 µl in 5 s, 5 µl 5 s, 10 µl in 6 s, 20 µl in 9 s; 1536-well: 1 µl in 14 s, 5 µl in 26 s
Dispensing accuracy (typical)	Small tube dispensing cassette 2 µl: ±10%; 10 µl: ±5% >10 µl: ±5%; Standard tube dispensing cassette 5 µl:±3%; 20 µl: ±2%; 100 µl: ±1%; >100 µl: ±1%
Dispensing precision	Small tube dispensing cassette 0.5 µl: CV≤10%; 2 µl: CV≤5%; 10 µl: CV≤3%; >10 µl: CV≤3% Standard tube dispensing cassette 5 µl: CV≤10%; 20 µl: CV≤1.5%; 100 µl: CV≤1%; >100 µl: CV≤1%
Dead volume	<1 ml for volume range 0.5 - 50 µl; <7 ml for volume range >50 µl
W×D×H (mm)	355×330×220
Weight (kg)	9,1

Description	Pk	Cat. No.
Multidrop® Combi	1	**735-0633**
Multidrop® Combi with SMART option for cassette lifetime traceability	1	**736-0858**

Description	Pk	Cat. No.
Accessories		
Standard tube dispensing cassette	5	**735-0259**
Standard tube dispensing cassette	10	**735-0260**
SMART standard tube dispensing cassette (with 400 mm tubing set)	1	**736-0392**
SMART standard tube dispensing cassette (with 400 mm tubing set)	5	**736-0416**
Long standard tube dispensing cassette (length of tubing 50 - 200 cm in 10 cm increments)	1	**735-0453**
SMART long standard tube dispensing cassette	1	**736-0417**

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Description	Pk	Cat. No.
Accessories		
Small tube plastic tip dispensing cassette for volumes 0.5 - 50 µl	1	**735-0261**
Small tube plastic tip dispensing cassette	5	**736-3000**
Long, small tube, plastic tip dispensing cassette	1	**736-0418**
Small tube metal tip dispensing cassette for volumes 0.5 - 50 µl	1	**735-0262**
Small tube metal tip dispensing cassette	5	**736-3001**
Long, small tube, metal tip dispensing cassette	1	**736-0419**
FILLit software for Multidrop® Combi	1	**736-0421**

Modules, Nunc-Immuno™
Thermo Scientific

PS

Nunc-Immuno™ modules have been developed for ELISA techniques where the demands of versatility require a different solution to the standard 96-well plate format. Available with a choice of MaxiSorp™, PolySorp™, MediSorp™ and MultiSorp™ surfaces. All MaxiSorp™ modules are certified for binding homogeneity. Framed modules (external dimensions: 128×86 mm) fit all standard equipment.

MaxiSorp™ surface has a high affinity to molecules with mixed hydrophilic/hydrophobic domains; PolySorp™ surface has a high affinity for hydrophobic molecules; MediSorp™ has a surface chemistry intermediate between PolySorp™ and MaxiSorp™, providing low background signal with samples containing serum; MultiSorp™ surfaces have a high affinity to hydrophilic molecules.

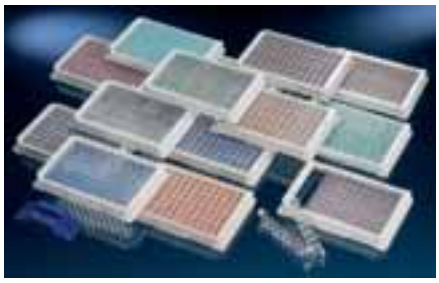
- With Nunc StarWell™ modules incubation time can be reduced by more than 50% or the sensitivity similarly increased
- Small numbers of samples can be processed more economically
- Available framed or unframed, modules remain in the frame when inverted
- Choice of well shape: Round (U), flat (F) or C-shaped (flat with curved edges)

Colour coded modules available on request, please visit www.vwr.com or contact your local VWR sales office for further information.

Description	Colour	Recommended working volume (µl)	Pk	Cat. No.
Nunc-Immuno™ modules, individual strips				
MaxiSorp™, F8 wells per strip	Clear	350	640	**735-0054**
MaxiSorp™, F16 wells per strip	Clear	350	320	**735-0052**
MaxiSorp™, U16 wells per strip	Clear	250	320	**735-0050**
PolySorp™, F8 wells per strip	Clear	350	640	**735-0055**
PolySorp™, F16 wells per strip	Clear	350	320	**735-0053**
Nunc-Immuno™ modules, framed				
MaxiSorp™, C8×12 wells per frame	Clear	250	60	**735-0021**
MaxiSorp™, C8×12 StarWell™ per frame	Clear	250	60	**735-0015**
MaxiSorp™, C12×8 per frame	Clear	250	60	**735-0063**
MediSorp™, F8×12 wells per frame	Clear	350	60	**735-0042**
MultiSorp™, F8×12 wells per frame	Clear	350	60	**735-0043**
MaxiSorp™, F8×12 wells per frame	Clear	350	60	**735-0048**
MaxiSorp™, F16 (2×8 wells) ×6 per frame	Clear	250	60	**735-0126**
MaxiSorp™, U8×12 wells per frame	Clear	250	60	**735-0066**
PolySorp™, C8×12 wells per frame	Clear	250	60	**735-0020**
PolySorp™, C8×12 StarWell™ per frame	Clear	250	60	**735-0014**
PolySorp™, C12×8 per frame	Clear	250	60	**735-0064**
PolySorp™, F8×12 wells per frame	Clear	350	60	**735-0049**
PolySorp™, F16 (2×8 wells) ×6 wells per frame	Clear	350	60	**735-0046**
PolySorp™, U8×12 wells per frame	Clear	250	60	**735-0067**

Description	Pk	Cat. No.
Accessories		
Frames, PE	60	**732-2686**
8-well strip caps, PE	180	**732-2681**
8-well strip caps, PE, sterile	120	**732-2682**

Modules, Nunc-Immuno™, BreakApart™
Thermo Scientific



PS

Designed for solid phase immunoassays, for example, ELISA techniques. Available with MaxiSorp™ or PolySorp™ surface chemistries, the product consists of a frame with 12 carriers, each holding a breakable strip of 8 wells. All MaxiSorp™ modules are certified for binding homogeneity. Framed modules with alphanumeric orientation (external dimensions: 128×86 mm) fit all standard equipment.

- C-shaped well bottom (flat with curved edges) for optimal washing and liquid retrieval
- Push-out tool supplied with every case of 60 modules
- Colour coded modules facilitate assay identification (please enquire for availability)
- Free-standing modules

Recommended working volume: 250 µl

Description	Colour	Pk	Cat. No.
Nunc-Immuno™ BreakApart™ modules, framed, 96-wells per frame			
MaxiSorp™ C8×12 modules	Clear	60	**735-0065**
PolySorp™ C8×12 modules	Clear	60	**735-0062**

Plates and modules, Nunc Immobilizer™
Thermo Scientific

PS, non sterile, without lid

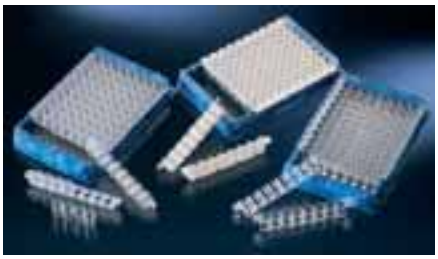
Available with a choice of surface chemistries: Amino surface for rapid coupling of peptides and proteins; streptavidin surface for rapid coupling of biotinylated biomolecules such as peptides, antibodies, oligonucleotides or haptens; nickel-chelate surface for rapid coupling of 6X Histidine-tagged proteins; and glutathione surface for rapid coupling of GST-tagged fusion proteins. Also available clear, for colorimetric assays and sample storage, white, for luminescence and fluorescence assays, or black, for fluorescence assays.

- Ready to use plates and modules requiring no activation or blocking steps
- Robust and stable surfaces with long shelf life
- High sensitivity and specificity
- High specific binding
- High signal to noise ratio

Total well volume: 400 µl (96-well plates and flat well strips), 350 µl (C-well strips), 120 µl (384-well plates)

Description	Type	Pk	Cat. No.
Immobilizer™ plates and modules, amino			
Clear, flat bottom, 96-well	Amino	30	**734-1277**
White, flat bottom, 96-well	Amino	30	**734-1278**
Black, flat bottom, 96-well	Amino	30	**734-1279**
Clear, flat bottom, 384-well	Amino	30	**734-1280**
Black, flat bottom, 384-well	Amino	30	**734-1282**
Clear, flat bottom, F8 (×12) strips in frame	Amino	30	**734-1283**
Clear, curved edge bottom, C8 (×12) LockWell™ strips in frame	Amino	30	**734-1292**
Immobilizer™ plates and modules, streptavidin			
Clear, flat bottom, 96-well	Streptavidin	15	**734-1284**
White, flat bottom, 96-well	Streptavidin	15	**734-1285**
Black, flat bottom, 96-well	Streptavidin	15	**734-1286**
Clear, flat bottom, 384-well	Streptavidin	15	**734-1287**
White, flat bottom, 384-well	Streptavidin	15	**734-1288**
Clear, flat bottom, F8 (×12) strips in frame	Streptavidin	15	**734-1290**
Clear, curved edge bottom, C8 (×12) LockWell™ strips in frame	Streptavidin	15	**734-1291**
Immobilizer™ plates, nickel-chelate			
Clear, flat bottom, 96-well	Nickel-Chelate	15	**734-1223**
Black, flat bottom, 96-well	Nickel-Chelate	15	**734-1225**
Immobilizer™ plates, glutathione			
Clear, flat bottom, 96-well	Glutathione	15	**734-1229**
White, flat bottom, 96-well	Glutathione	15	**734-1230**
Black, flat bottom, 96-well	Glutathione	15	**734-1231**

CovaLink™ NH modules, Nunc™
Thermo Scientific



PS

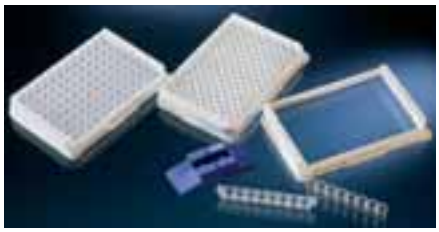
Developed to bind compounds covalently to plastic surfaces. For use with molecules which do not adsorb easily to a traditional surface. Framed modules with alphanumeric orientation (external dimensions: 128×86 mm) fit all standard equipment.

- Very thorough washing possible with high ionic strength solutions
- Minimum non-specific binding
- Allows site-specific binding via, for example, a carboxylic group of peptide or phosphate group in the 5' end of nucleic acids
- Free-standing modules with flat (F) wells

Recommended working volume: 100 µl

Description	Colour	Pk	Cat. No.
F8×12 module, clear, framed	Clear	30	**735-0153**

Modules, Nunc-Immuno™ LockWell™
Thermo Scientific



PS

Nunc-Immuno™ LockWell™ modules facilitate assays from large scale screening to single-well tests. Available with a choice of MaxiSorp™, PolySorp™, MediSorp™ and MultiSorp™ surfaces*. All MaxiSorp™ modules are certified for binding homogeneity. Framed modules (external dimensions: 128×86 mm) fit all standard equipment.

- Each well locks in the frame at the same height to prevent jamming in automated systems
- Strips are easy to take out or put in the frame, without use of any special tools

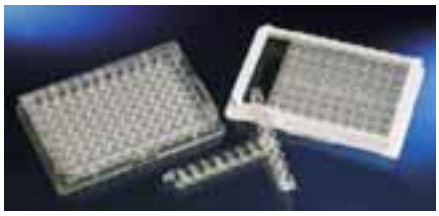
*MaxiSorp™ surface has a high affinity to molecules with mixed hydrophilic/hydrophobic domains; PolySorp™ surface has a high affinity for hydrophobic molecules; MediSorp™ has a surface chemistry intermediate between PolySorp™ and MaxiSorp™, providing low background signal with samples containing serum; MultiSorp™ surfaces have a high affinity to hydrophilic molecules.

Colour coded modules available on request, please visit www.vwr.com or contact your local VWR sales office for further information.

Description	Colour	Pk	Cat. No.
Nunc-Immuno™ LockWell™ modules, framed, 96 wells per frame			
PolySorp™, C8×12	Clear	60	**735-0023**
MaxiSorp™, C8×12	Clear	60	**735-0024**
MediSorp™, C8×12	Clear	60	**735-0025**
MultiSorp™, C8×12	Clear	60	**732-2685**

Description	Pk	Cat. No.
Accessories		
LockWell™ frame	60	**732-2689**

Solid microplates, streptavidin passively coated, Nunc™
Thermo Scientific



PS

Streptavidin passively coated plates are ideal for binding biotinylated biomolecules such as peptides, antibodies, oligonucleotides or haptens.

- C-shaped well bottom (flat with curved edges) for optimal washing and liquid retrieval
- Streptavidin is passively coated on an area of 154 mm^2 (area covered by a volume of 200 µl)
- Binding capacity for biotin of at least 13 pmol/well*
- Stable at room temperature

Colour: Clear

Coated well volume: 200 µl

Description	Pk	Cat. No.
Streptavidin coated C96 plate, 96-wells per frame	15	**735-0000**

Description	Pk	Cat. No.
Accessories		
8-well strip caps, PE	180	**732-2681**

* Depending on size or sterical properties of a given biomolecule the actual molar binding capacity might be different.

Plates and modules, FluoroNunc™ and LumiNunc™
Thermo Scientific

PS, with MaxiSorp™ or PolySorp™ treated surface

For fluorescence and luminescence based immunoassays and binding assays. Available with a choice of certified MaxiSorp™ surface, with high affinity to molecules with mixed hydrophilic/hydrophobic domains, or, PolySorp™ surface, less polar than MaxiSorp™ and with affinity to molecules of a more hydrophobic nature.

- Choice of framed modules or 96-well plates with either flat (F) or C-shaped wells
- White modules/plates give maximum reflection with minimum autofluorescence and autoluminescence
- Black modules/plates give minimum background in fluorescence reading, allow minimum back scattered light, and minimise cross talk
- Clear modules/plates are suitable for time-resolved fluorescence

Description	Colour	Recommended working volume (µl)	Pk	Cat. No.
Modules for fluorescence, framed				
MaxiSorp™, C12×8 wells, clear*	Clear	250	60	**735-0012**
MaxiSorp™, C8×12 wells, white*	White	250	60	**735-0006**
PolySorp™, C8×12 wells, white	White	250	60	**735-0007**
MaxiSorp™, F16×6 wells, black*	Black	350	60	**735-0070**
PolySorp™, F16×6 wells, black	Black	350	60	**735-0071**

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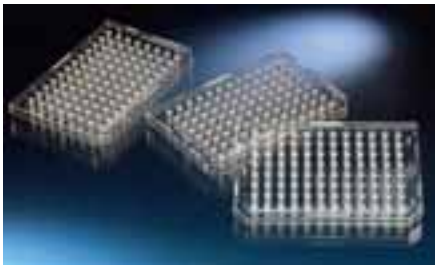
Description	Colour	Recommended working volume (µl)	Pk	Cat. No.
96-well plates for fluorescence				
MaxiSorp™, C96, clear*	Clear	250	60	**735-0013**
MaxiSorp™, C96, white*	White	250	60	**735-0008**
MaxiSorp™, F96, black*	Black	350	80	**735-0004**
PolySorp™, F96, black	Black	350	80	**735-0005**
96-well plates for fluorescence and luminescence				
MaxiSorp™, F96, white*	White	350	80	**735-0002**
PolySorp™, F96, white	White	350	80	**735-0003**

* With certificate

Plates, Nunc-Immuno™ TSP (transferable solid phases)
Thermo Scientific



PS

For simultaneous testing of analytes using ELISA technique. Also available sterile for screening of hybridoma cultures for antibody production.

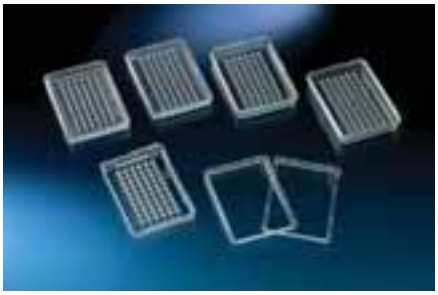
MaxiSorp™ surface has a high affinity to molecules with mixed hydrophilic/hydrophobic domains.

- Uniform adsorption properties
- Plates have 96 round bottom wells with total surface area of 95 mm^2
- Sterile plates supplied mounted in the tray

Colour: Clear

Description	No. of wells	Sterile	Pk	Cat. No.
Nunc-Immuno™ TSP plates, sterile, for hybridoma screening	96	+	50	**735-0022**
Nunc-Immuno™ TSP plates with MaxiSorp™ surface	96	-	210	**735-0074**

MiniTrays, Nunc™
Thermo Scientific



PS

Useful in serotyping, cytotoxicity and cell cloning studies.

- Limited adsorption of proteins
- Optical clarity allows use with inverted microscopes
- Lids have keyed tabs for proper orientation
- Large raised alphanumeric coordinates
- Surface treated to maximise sample and reagent mixing

Model	MiniTray, low profile, with lid	MiniTray, high profile, S-plate
Dimensions (mm)	Top: 3,82; Bottom: 1,34; Depth: 1,92	Top: 3,72; Bottom: 1,30; Depth: 2,10
Total volume (µl)	10	
Tray W×L (mm)	81×56 (without lid); 84×94 (with lid)	81×56 (without lid)

Description	No. of wells	Pk	Cat. No.
60-well MiniTray, low profile, with lid	60	480	**735-0201**
72-well MiniTray, low profile, with lid	72	480	**735-0202**
60-well MiniTray, high profile, S-plate, without lid	60	400	**735-0203**

Plates, 96-MicroWell™, Nunc-Immuno™
Thermo Scientific

PS, clear, without lid

Plates designed specifically for quantitative and qualitative solid phase immunoassays (for example, ELISA) and binding assays. Available with a choice of MaxiSorp™, PolySorp™, MediSorp™ and MultiSorp™ surfaces*. All MaxiSorp™ plates are certified for binding homogeneity.

MaxiSorp™ surface has a high affinity to molecules with mixed hydrophilic/hydrophobic domains; PolySorp™ surface has a high affinity for hydrophobic molecules; MediSorp™ has a surface chemistry intermediate between PolySorp™ and MaxiSorp™, providing low background signal with samples containing serum; MultiSorp™ surfaces have a high affinity to hydrophilic molecules.

- Choice of high flange or pinchbar design and flat (F), round (U) or C-shaped well bottoms
- Plates have alphanumeric markings and fit all standard equipment
- Barcoded version also available

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Description	Recommended working volume (µl)	No. of wells	Pk	Cat. No.
Nunc-Immuno™ 96-MicroWell™ plates, pinchbar design				
MaxiSorp™, C96 wells per plate	250	96	60	**735-0079**
MaxiSorp™, F96 wells per plate*	350	96	60	**735-0199**
MaxiSorp™, F96 wells per plate	350	96	60	**735-0083**
PolySorp™, C96 wells per plate	250	96	60	**735-0096**
MaxiSorp™, C96 wells per plate*	250	96	60	**735-0097**
PolySorp™, F96 wells per plate	350	96	60	**735-0131**
Nunc-Immuno™ 96-MicroWell™ plates, high flange design				
MaxiSorp™, U96 wells per plate	250	96	60	**735-0030**
PolySorp™, F96 wells per plate	350	96	180	**735-0033**
MaxiSorp™, F96 wells per plate*	350	96	180	**735-0034**
MaxiSorp™, F96 wells per plate, with barcode*	350	96	180	**735-0038**
MediSorp™, F96 wells per plate*	350	96	60	**735-0044**
MultiSorp™, F96 wells per plate	350	96	60	**735-0045**
PolySorp™, U96 wells per plate	250	96	60	**735-0068**

* With certificate

Immunoassay microplates

Thermo Scientific

Designed specifically for immunoassay applications, this range of products have binding surfaces that include Immulon®, universal binding (UB) and enhanced binding (EB). These make good experimental design easier, allowing development of assays with stringent pH, buffer, pKa and resin requirements.

Immulon® 1 B and UB microplates have medium binding surfaces with a binding capacity of 100 to 200 ng IgG/cm². Both have an affinity for hydrophobic complexes and proteins. Molecules for medium binding surfaces include polyclonal antibodies, proteins, immunoglobulins, lipids, lipoproteins and lipopolysaccharides.

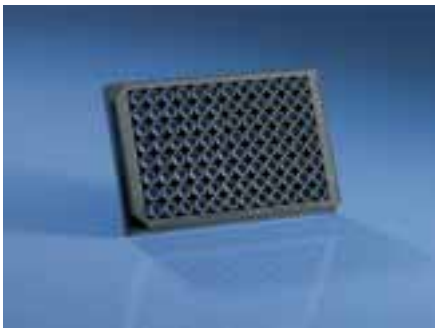
Immulon® 2 HB, Immulon® 4 HBX and EB microplates have high binding, irradiated surfaces, with a binding capacity of 400 to 500 ng IgG/cm². Immulon® 4 HBX microplates have an extra surface with special resin for maximum protein uptake. EB microplates provide guaranteed coefficient of variation. Molecules for high binding surfaces include monoclonal and polyclonal antibodies, proteins, peptides, polysaccharides, glycoproteins, immunoglobulins, lipoproteins, glycoproteins and purified antigens.

- Available in 96-well or strip plate format for matching to the requirements of automated instruments
- Microplates with breakable strips offer maximum efficiency for processing both large and small sample numbers, as the exact number of wells required can be used
- Break-apart wells have a unique well locking system that keeps the wells and samples securely in place
- Strips available in 1×8 and 1×12 break-apart or solid strip format, with paired 2×8 strips also available

Description	Pk	Cat. No.
Immulon® microplates, 96-well		
Immulon® 1 B, medium binding, round bottom wells	50	**735-0463**
Immulon® 1 B, medium binding, flat bottom wells	50	**735-0461**
Immulon® 2 HB, high binding, round bottom wells	50	**735-0464**
Immulon® 2 HB, high binding, flat bottom wells	50	**735-0462**
Immulon® 4 HBX, high binding extra, flat bottom wells	50	**735-0465**
UB and EB microplates, 96-well		
Universal binding, flat bottom wells	50	**735-0531**
Enhanced binding, flat bottom wells	50	**735-0546**
Universal binding, sterile with lid, flat bottom wells	40	**735-0572**
Immulon® strip plates		
Immulon® 1 B, medium binding, flat bottom wells, 1×12 per strip	100	**735-0494**
Immulon® 1 B, medium binding, flat bottom wells, 2×8 per strip	100	**735-0502**
Immulon® 2 HB, high binding, flat bottom wells, 1×12 per strip	100	**735-0493**
Immulon® 2 HB, high binding, flat bottom wells, 2×8 per strip	100	**735-0503**
Immulon® 4 HBX, high binding extra, flat bottom wells, 1×12 per strip	100	**735-0500**
Immulon® 4 HBX, high binding extra, flat bottom wells, 2×8 per strip	100	**735-0504**
Immulon® loose strips		
Immulon® 2 HB, high binding, flat bottom wells, 1×12 per strip	320	**735-0492**
Immulon® 4 HBX, high binding extra, flat bottom wells, 1×12 per strip	320	**735-0499**
Breakable strip plates		
Enhanced binding, flat bottom wells, 1×8 per strip	50	**735-0540**
Universal binding, flat bottom wells, 1×8 per strip	50	**735-0551**
Immulon® 1 B, medium binding, flat bottom wells, 1×12 per strip	320	**735-0491**
Solid strip plates		
Enhanced binding, flat bottom wells, 1×8 per strip	50	**735-0537**

Description	Pk	Cat. No.
Accessories		
Holder for 1x12 strips	10	**735-0193**

96-well microplates for immunology, BRANDplates®
Brand



PS, solid or with transparent base

Plates are available with different well shapes (round U-bottom, conical V-bottom, flat F-bottom or C flat bottom with curved edges), in different colours, and with a choice of treated surfaces.

immunoGrade™

The surface of these plates is optimised for the immobilisation of IgG, showing a high binding capacity for molecules with hydrophilic and hydrophobic regions. Plates with an immunoGrade™ surface are the best choice for standard ELISA applications.

hydroGrade™

Strongly hydrophilic surface. Especially well suited for binding molecules with predominantly hydrophilic regions. Plates with a hydroGrade™ surface can be used in liquid phase assays with hydrophobic components.

lipoGrade™

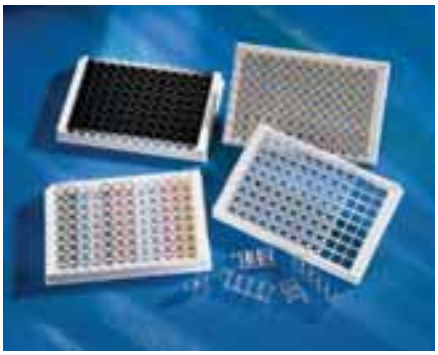
Strongly hydrophobic (lipophilic) surface. Especially suitable for binding molecules with hydrophobic regions. Microplates with lipoGrade™ surfaces can be used in liquid phase assays with hydrophilic components.

- All BRANDplates® are alphanumerically labelled, stackable and compatible with most standard microplate readers and washers
- Standard 96-well plates have coloured alphanumeric code identifying surface type (cell culture treated orange, immuno treated blue, non-treated grey)
- White plates provide maximum reflection and minimum crosstalk during luminescence measurements; black plates provide minimum back light scatter during fluorescence analyses

BRANDplates® are non cytotoxic according to ISO 10993-5, free of endotoxins (<0,01 EU/ml), and free from DNA, DNase and RNase.

Description	Colour	Well volume (µl)	Pk	Cat. No.
immunoGrade™				
Standard plate with U-bottom	Clear	330	100	**735-2042**
Standard plate with V-bottom	Clear	360	100	**735-2043**
Standard plate with F-bottom	Clear	350	100	**735-2044**
Standard plate with C-bottom	Clear	350	100	**735-2045**
Standard plate with U-bottom	White	330	100	**735-2046**
Standard plate with C-bottom	White	350	100	**735-2047**
Standard plate with U-bottom	Black	330	100	**735-2048**
Standard plate with C-bottom	Black	350	100	**735-2049**
Transparent base with F-bottom	Black/Clear	330	100	**735-2050**
hydroGrade™				
Standard plate with U-bottom	Clear	330	100	**735-2054**
Standard plate with F-bottom	Clear	350	100	**735-2055**
Standard plate with C-bottom	Clear	350	100	**735-2056**
Standard plate with U-bottom	White	330	100	**735-2057**
Standard plate with C-bottom	White	350	100	**735-2058**
Standard plate with U-bottom	Black	330	100	**735-2059**
Standard plate with C-bottom	Black	350	100	**735-2060**
lipoGrade™				
Standard plate with U-bottom	Clear	330	100	**735-2064**
Standard plate with V-bottom	Clear	360	100	**735-2065**
Standard plate with F-bottom	Clear	350	100	**735-2066**
Standard plate with C-bottom	Clear	350	100	**735-2067**
Standard plate with U-bottom	White	330	100	**735-2068**
Standard plate with C-bottom	White	350	100	**735-2069**
Standard plate with U-bottom	Black	330	100	**735-2070**
Standard plate with C-bottom	Black	350	100	**735-2071**
Transparent base with F-bottom	White/Clear	330	100	**735-2072**
Transparent base with F-bottom	Black/Clear	330	100	**735-2073**

Strip plates, 96-well, Stripwell®
Corning®



PS, flat bottom

Designed for *in vitro* diagnostic assays. The flat bottom strips easily break apart and are pre-assembled in an 'egg-crate' style strip holder that allows each individual well to be positioned back into the plate once broken.

- Standard format with well volume of 360 µl, working volume 75 to 200 µl (low volume format also available, please enquire for details)
- 1×8 strips are designed to fit only one way into the strip holder, eliminating the chance of misorientation

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Description	Colour	Well volume (µl)	No. of wells	Sterile	Pk	Cat. No.
Standard Stripwell microplates						
Standard microplate, medium binding*	Clear	360	96	-	100	**734-1515**
Standard microplate, high binding*	Clear	360	96	-	100	**734-1514**
Standard microplate, high binding**	Clear	360	96	-	800	**732-5504**
Standard microplate, TC-treated, sterile***	Clear	360	96	+	50	**732-5569**
Standard microplate, medium binding	White	360	96	-	100	**732-5545**
Standard microplate, high binding	Black	360	96	-	100	**732-5548**
Standard microplate, medium binding	Black	360	96	-	100	**732-5546**
Standard microplate, high binding	White	360	96	-	100	**732-5547**

*Product has a certified surface chemistry
**Individual 1×8 strips without frame, bulk packed
***Microplates individually packaged with lid

Nunc-Immuno™ stick
Thermo Scientific

PP tube and stick, PS paddle

Developed for ELISA and RIA tests in the field.

- Gives reliable, semi-quantitative results with built-in negative control
- Hydrophilic MaxiSorp™ paddle surface
- PP tube for minimal adsorption of assay components

Paddle surface area: 5,2 cm^2

External L×W (including lid): 49×12 mm

Description	Pk	Cat. No.
Nunc-Immuno™ stick with MaxiSorp™ paddle surface	1.800	**391-8283**

Tubes, Nunc-Immuno™, Nunc™
Thermo Scientific

PS with a choice of MaxiSorp™ (hydrophilic) or PolySorp™ (hydrophobic) surfaces

Nunc-Immuno™ tubes are used for solid phase immunoassay methods such as IRMA, ELISA and ILMA methods.

- Nunc StarTubes™ with an increased internal surface, give higher sensitivity and faster assay times
- Very good optical quality and MaxiSorp™ versions have certified binding homogeneity
- Compatible with standard equipment

Capacity (ml)	Description	Ø ext.×H (mm)	Pk	Cat. No.
4,0	Tubes MaxiSorp™	11×70	1.800	**735-0019**
5,0	Tubes MaxiSorp™	12×75	3.000	**735-0018**
5,0	Nunc StarTubes™, MaxiSorp™	12×75	3.000	**391-8281**
5,0	Nunc StarTubes™, PolySorp™	12×75	3.000	**735-0072**

Biotinylation kits, ChromaLink™ Biotin Antibody Labelling kit

ChromaLink™ Biotin Protein Labelling kit offers a complete solution for the quantitative biotinylation of proteins from 20 kDa to 200 kDa and from 25 µg to 1 mg. The kit incorporates traceable biotin on proteins and allows for direct spectrophotometric verification of biotin incorporation. A simple Å280 and Å354 measurement determines the number of biotins per protein molecule.

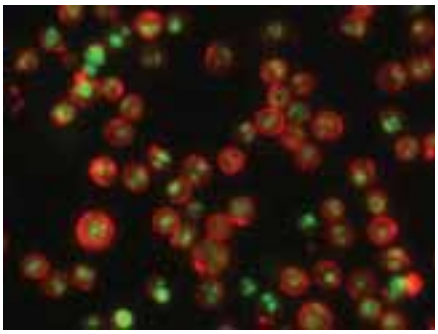
- Complete kit containing sufficient material to biotinylate five samples of 25 µg to 1 mg
- Fast and easy method to biotinylate and determine the extent of protein labelling with one reagent
- Simple calculations based on UV absorbance estimates total biotin incorporation (moles of biotin per mole of protein/peptide)
- Non-destructive assay that does not destroy biotinylated sample

Ordering information: Each kit contains: Sulfo-Chromlink biotin (5×0,5 mg), 10X modification buffer (2×1,0 ml), 10X PBS (2×1,0 ml), Zeba™ desalt spin columns (12), collection tubes (no lids) (24×1,5 ml), storage tubes (12×1,5 ml), bovine IgG @1 mg/ml (0,5 ml), biotinylated IgG @1 mg/ml (0,5 ml), and 512 MB flash drive with software.

Description	Pk	Cat. No.
ChromaLink™ Biotin Antibody Labelling kit	1 KIT	**733-2500**

Fluorescent probes, NucView™ 488 caspase-3 substrate

Biotium



NucView™ 488 caspase-3 substrate is a fluorescent probe for detection of caspase-3 activity in living cells.

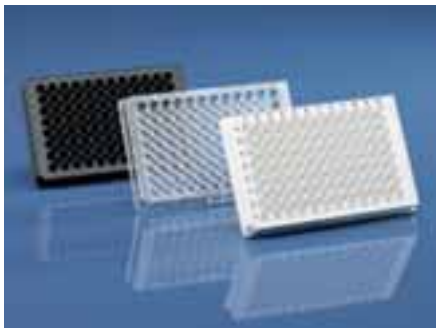
NucView™ 488 caspase-3 substrate consists of the DEVD caspase-3 substrate peptide attached to a nucleic acid dye. The substrate is non fluorescent until it is cleaved by caspase-3 to release the dye, which stains the nucleus with bright green fluorescence. NucView™ 488 caspase-3 substrate has been used with many different immortalised and primary cell types in adherent, suspension and 3-D cultures. The substrate is offered in DMSO, which facilities staining in some cells, in PBS for DMSO sensitive cells, and in kits with caspase-3 inhibitor or other apoptosis probes.

- Real-time monitoring of caspase-3 activity
- Rapid, homogenous, no wash assay
- Image live cells or fix with formaldehyde after staining
- For flow cytometry, fluorescence microscopy, or microplate reader using FITC settings

Description	Pk	Cat. No.
NucView™ 488 caspase-3 enzyme substrate, 1 mM in DMSO	100 µl	**10402**
NucView™ 488 caspase-3 enzyme substrate, 1 mM in PBS	100 µl	**10403**
NucView™ 488 caspase-3 assay kit for live cells, 100 assays	1 KIT	**30029**
NucView™ 488 and MitoView 633 apoptosis kit, 100 assays	1 KIT	**30062**
Dual apoptosis kit with NucView™ 488 and CF594 Annexin V, 50 assays	1 KIT	**30067**

96-well microplates, non treated, BRANDplates®

Brand



PS, solid plates or with transparent base

Plates are available with different well bottom shapes (round U-bottom, conical V-bottom, flat F-bottom or C flat bottom with curved edges), in different colours, and either sterile or non sterile.

pureGrade™

Non treated, medium binding, non sterile surface. These plates are suitable for homogeneous assays, screening and storage.

pureGrade™ S

Non treated, medium binding, sterile surface. Sterilised by β radiation, these plates are especially well suited for bacteriological assays.

- All BRANDplates® are alphanumerically labelled, stackable and compatible with most standard microplate readers and washers
- White plates provide maximum reflection and minimum crosstalk during luminescence measurements; black plates provide minimum back light scatter during fluorescence analysis
- Sterile plates are supplied individually wrapped with lid

BRANDplates® are non cytotoxic according to ISO 10993-5, free of endotoxins (<0.01 EU/ml), and free from DNA, DNase and RNase. Sterile products comply with ISO 11137 and AAMI guidelines.

Description	Colour	Well volume (µl)	Sterile	Pk	Cat. No.
pureGrade™					
Standard plate with U-bottom	Clear	330	-	100	**735-2000**
Standard plate with V-bottom	Clear	360	-	100	**735-2001**
Standard plate with flat bottom	Clear	350	-	100	**735-2002**
Standard plate with C-bottom	Clear	350	-	100	**735-2003**
Standard plate with U-bottom	White	330	-	100	**735-2004**
Standard plate with flat bottom	White	350	-	100	**735-2005**
Standard plate with U-bottom	Black	330	-	100	**735-2006**
Standard plate with flat bottom	Black	350	-	100	**735-2007**
Transparent base with flat bottom	White/Clear	330	-	100	**735-2008**
Transparent base with flat bottom	Black/Clear	330	-	100	**735-2009**
pureGrade™ S					
Standard plate with U-bottom	Clear	330	+	50	**735-2022**
Standard plate with V-bottom	Clear	360	+	50	**735-2023**
Standard plate with flat bottom	Clear	350	+	50	**735-2024**
Standard plate with C-bottom	Clear	350	+	50	**735-2025**
Standard plate with flat bottom	White	350	+	50	**735-2026**
Standard plate with flat bottom	Black	350	+	50	**735-2027**
Transparent base with flat bottom	White/Clear	330	+	50	**735-2028**
Transparent base with flat bottom	Black/Clear	330	+	50	**735-2029**

96-well assay plates

Biotix

Medical grade, virgin PP, non treated

The large well diameter of Biotix 96-well assay plates make them ideal for a broad range of applications, including compound libraries and combinatorial chemistry. Available with either V-shaped or U-shaped well bottom to suit assay needs.

- Raised "chimney" wells reduce cross-contamination and allow secure application of cap mats and sealing films
- Alphanumeric grid helps with sample identification
- Notched bottom left corner ensures correct plate orientation

Conform to ANSI/SBS 1-2004 standard for automated high throughput processing. Each lot of product is BioReady™ certified for the most sensitive assays.

Description	Sterile	Total volume (µl)	Packed	Pk	Cat. No.
Assay plates, 96-well, V-bottom	-	330	10 plates/pack, 10 packs/case	10	**732-2470**
Assay plates, 96-well, V-bottom	+	330	10 plates/pack, 10 packs/case	10	**732-2471**
Assay plates, 96-well, U-bottom	-	350	10 plates/pack, 10 packs/case	10	**732-2472**
Assay plates, 96-well, U-bottom	+	350	10 plates/pack, 10 packs/case	10	**732-2473**

96-well microplates, Falcon®
Corning®

Falcon® 96-well microplates are available in a variety of configurations and surface chemistries to meet a wide range of applications with fluorescence, luminescence, radiometric or colorimetric endpoints.

- Choice of clear or white PS plates
- Available with untreated or tissue culture-treated surface chemistries
- All PS plates have standard microplate footprint which meet SBS specifications

Description	Colour	Volume (ml)	Sterile	Packed	Pk	Cat. No.
96-well (round-bottom) PS microplates, without lid						
Non treated	Clear	0,3	-	5/bag	50	**734-0080**
96-well (flat-bottom) PS microplates, with lid						
TC-treated	White	0,3	+	5/bag	50	**734-0396**

Clear polystyrene microplates, 96-well
Corning®

PS, clear

Available with a choice of surface treatment and well profile, and with dimensions that meet proposed industry standards.

Description	Recommended working volume (µl)	Well volume (µl)	Sterile	Packed	Pk	Cat. No.
Standard plate, round bottom, TC treated, without lid	75 - 200	330	+	25/bag	100	**734-1548**
Standard plate, round bottom, High Bind surface, without lid, for EIA/RIA	75 - 200	330	-	25/bag	100	**734-1784**
Standard plate, round bottom, non treated, without lid	75 - 200	330	+	individually wrapped	50	**734-1553**
Standard plate, round bottom, non treated, with lid	75 - 200	330	+	20/bag	100	**734-1641**
Standard plate, round bottom, non treated, without lid	75 - 200	330	+	25/bag	100	**734-1644**
Standard plate, round bottom, non treated, without lid, for EIA/RIA	75 - 200	330	-	25/bag	100	**732-5543**
Standard plate, round bottom, non treated, without lid*	75 - 200	330	-	25/bag	100	**734-1645**
Standard plate, flat bottom, Carbo-BIND™ surface, without lid	75 - 200	360	-	individually wrapped	50	**734-1507**
Standard plate, flat bottom, Sulfhydryl-BIND™ surface, without lid	75 - 200	360	-	individually wrapped	50	**734-1509**
Standard plate, Easy Wash™, non treated, without lid, for EIA/RIA	75 - 200	360	-	25/bag	100	**734-1785**
Standard plate, Easy Wash™, High Bind surface, without lid, for EIA/RIA	75 - 200	360	-	25/bag	100	**734-1786**
Standard plate, flat bottom, High Bind surface, without lid, for EIA/RIA	75 - 200	360	-	individually wrapped	100	**734-1790**
Standard plate, flat bottom, High Bind surface, with lid, for EIA/RIA	75 - 200	360	+	20/bag	100	**734-1783**
Standard plate, flat bottom, non treated, with lid	75 - 200	360	+	20/bag	100	**734-1554**
Standard plate, flat bottom, non treated, without lid, for EIA/RIA	75 - 200	360	-	individually wrapped	50	**734-1791**
Standard plate, flat bottom, TC treated, with lid	75 - 200	360	+	5/bag	100	**734-1795**
Standard plate, flat bottom, TC treated, with lid	75 - 200	360	+	20/bag	100	**734-1611**
Standard plate, flat bottom, NBS™ surface, without lid	75 - 200	360	-	25/bag	100	**732-5521**
Standard plate, flat bottom, non treated, without lid, for EIA/RIA	75 - 200	360	-	25/bag	100	**732-5567**
Standard plate, flat bottom, High Bind surface, without lid	75 - 200	360	-	25/bag	100	**732-5568**

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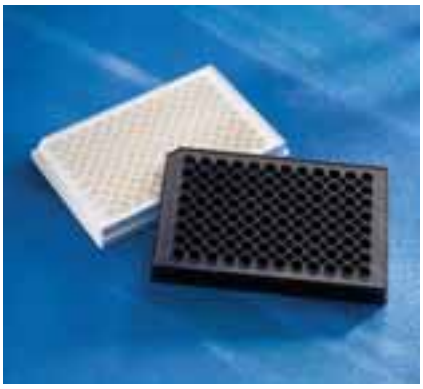
Description	Recommended working volume (µl)	Well volume (µl)	Sterile	Packed	Pk	Cat. No.
Standard plate, V bottom, non treated, without lid	75 - 200	320	+	individually wrapped	48	**734-1657**
Standard plate, V bottom, non treated, without lid*	75 - 200	320	-	25/bag	100	**734-1659**
Standard plate, V bottom, non treated, without lid	75 - 200	320	-	25/bag	100	**734-1658**

*Processed to improve hydrophilicity for haemagglutination and similar assays

Solid black and white microplates, 96-well
Corning®

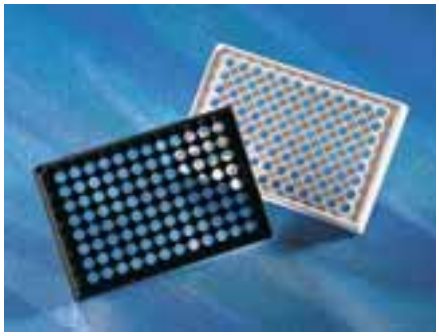


PS, without lid, non sterile

Available either with NBS™ non binding surface, ideal for reducing protein and nucleic acid binding at low concentrations, and for increasing assay signal-to-noise ratio, or with High Bind surface for immunological applications. Also available untreated for solution based assays.

Description	Recommended working volume (µl)	Well volume (µl)	Sterile	Pk	Cat. No.
Black 96-well microplates					
Flat bottom, NBS™ surface	75 - 200	360	-	25	**734-4169**
Flat bottom, NBS™ surface	75 - 200	360	-	100	**732-5522**
Flat bottom, High Bind surface	75 - 200	360	-	100	**734-1667**
Flat bottom, untreated	75 - 200	360	-	100	**734-1663**
Round bottom, untreated	75 - 200	330	-	100	**734-1643**
White 96-well microplates					
Flat bottom, NBS™ surface	75 - 200	360	-	25	**732-5596**
Flat bottom, NBS™ surface	75 - 200	360	-	100	**732-5515**
Round bottom, NBS™ surface	75 - 200	330	-	100	**732-5517**
Flat bottom, High Bind surface	75 - 200	360	-	100	**734-1666**
Flat bottom, untreated	75 - 200	360	-	100	**734-1662**
Round bottom, untreated	75 - 200	330	-	100	**734-1642**

Clear bottom black and white microplates, 96-well
Corning®



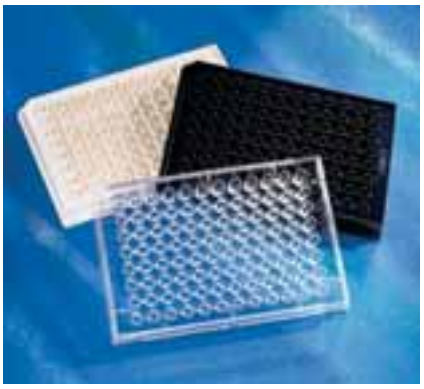
PS, flat bottom

- Bottoms are 60% thinner than conventional PS plates, resulting in lower background fluorescence and enabling readings down to 340 nm
- Opaque walls prevent well-to-well crosstalk
- Optically clear flat bottom profile permits direct microscope viewing

Description	Colour	Sterile	Pk	Cat. No.
Standard plate, CellBIND® surface, with lid	Black	+	50	**734-4069**
Standard plate, High Bind surface, without lid	Black	-	100	**734-1608**
Standard plate, NBS™ surface, without lid	White	-	100	**732-5516**
Special optics plate, TC treated, without lid	Black	+	100	**732-5518**
Special optics plate, untreated, with lid	Black	-	100	**732-5519**
Standard plate, untreated, without lid	Black	-	100	**734-1612**
Standard plate, untreated, without lid	White	-	100	**734-1613**
Standard plate, NBS™ surface, without lid	Black	-	100	**732-5523**
Standard plate, NBS™ surface, without lid	White	-	25	**734-4173**

NBS™ = Non Binding Surface

Microplates, 96-well, Half Area
Corning®



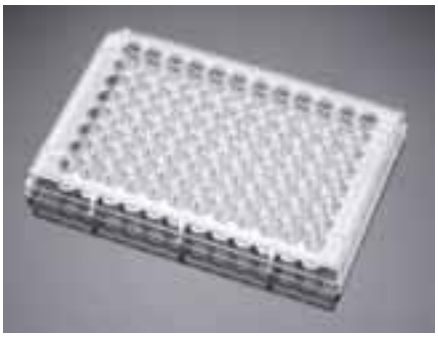
PS, flat bottom

Low volume microplates available with solid or clear flat bottom.

Recommended working volume: 25 to 125 µl

Description	Well volume (µl)	Sterile	Packed	Pk	Cat. No.
96-well clear microplates					
Clear Half Area 96-well microplates, TC treated, with lid, individually wrapped	190	+	1/bag	50	**734-1628**
Clear Half Area 96-well microplates, TC treated, with lid	190	+	25/bag	100	**734-1629**
Clear Half Area 96-well microplates, untreated, without lid	190	-	25/bag	100	**734-1627**
Clear Half Area 96-well microplates, High Bind surface, without lid	190	-	25/bag	100	**734-1624**
96-well solid black and white microplates					
Solid black Half Area 96-well microplates, non treated, without lid	190	-	25/bag	100	**734-1626**
Solid white Half Area 96-well microplates, non treated, without lid	190	-	25/bag	100	**734-1625**
Solid black Half Area 96-well microplates, TC treated, with lid	190	+	25/bag	100	**734-4153**
Solid white Half Area 96-well microplates, TC treated, with lid	190	+	25/bag	100	**734-1623**
Solid black Half Area 96-well microplates, NBS™ surface, without lid	190	-	5/bag	25	**734-4171**
Solid black Half Area 96-well microplates, NBS™ surface, without lid	190	-	25/bag	100	**734-1622**
Solid white Half Area 96-well microplates, NBS™ surface, without lid	190	-	5/bag	25	**734-4170**
Solid white Half Area 96-well microplates, NBS™ surface, without lid	190	-	25/bag	100	**734-4117**
96-well clear bottom black and white microplates					
Black with clear bottom Half Area 96-well microplates, TC treated, with lid	190	+	5/bag	25	**734-4123**
Black with clear bottom Half Area 96-well microplates, TC treated, with lid	190	+	25/bag	100	**734-4156**
Black with clear bottom Half Area 96-well microplates, TC treated, without lid	190	+	25/bag	100	**734-4161**
White with clear bottom Half Area 96-well microplates, TC treated, with lid	190	+	25/bag	100	**734-4159**
White with clear bottom Half Area 96-well microplates, TC treated, without lid	190	+	25/bag	100	**734-4160**
Black with clear bottom Half Area 96-well microplates, non treated, without lid	190	-	25/bag	100	**734-4154**
White with clear bottom Half Area 96-well microplates, non treated, without lid	190	-	25/bag	100	**734-4157**
Black with clear bottom Half Area 96-well microplates, NBS™ surface, without lid	190	-	25/bag	100	**734-4155**
White with clear bottom Half Area 96-well microplates, NBS™ surface, without lid	190	-	5/bag	25	**734-4172**
White with clear bottom Half Area 96-well microplates, NBS™ surface, without lid	190	-	25/bag	100	**734-4158**

Heparin binding plate
Corning®



Ideal for use in competitive binding assays utilising enzyme-labelled detection.

- Immobilises wide range of active and unmodified heparin and heparan sulphate molecules
- For cancer research, cell biology, and drug screening applications
- Requires less heparin and heparin binding species than other methods
- Offers high signal-to-noise performance
- Compatible with automation for HTS assays

Description	Pk	Cat. No.
Heparin binding plate, 96-well	5	**738-3000**

STERILE

Microplate lids
Corning®

PS

For use with Corning® microplates.

Description	Pk	Cat. No.
DMSO-resistant lid for 384-well microplates	50	**734-1536**
Universal lid without corner notch	100	**734-1538**
Universal lid with corner notch	50	**734-1539**

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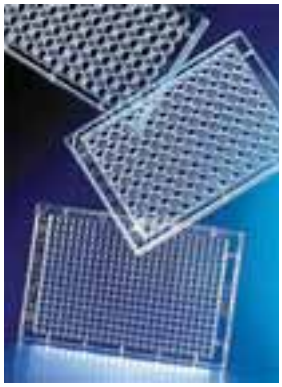
Description	Pk	Cat. No.
Low evaporation lid with corner notch and condensation rings for 96-well microplates only (not 2 ml block)	100	**734-1668**
Low evaporation lid with corner notch and condensation rings for 96-well microplates only (not 2 ml block)	50	**734-1669**
Black universal lid with corner notch	50	**734-4165**

UV microplates, 96-well
Corning®



Acrylic with UV transparent flat well bottom, non sterile

Ideal for determining protein and/or nucleic acid concentrations.

- UV transparent bottom is moulded directly to an acrylic base for greater strength and maximum leak resistance
- Allows UV absorbance readings with low background, especially at 260 to 280 nm
- Certified free from DNase and RNase

Description	Colour	Recommended working volume (µl)	Well volume (µl)	Sterile	Pk	Cat. No.
Standard 96-well plate, UV transparent base	Clear	75 - 200	360	-	50	**734-1614**
Half Area 96-well plate, UV transparent base	Clear	25 - 100	205	-	50	**734-4120**

Plates, 96-MicroWell™, Nunc™
Thermo Scientific

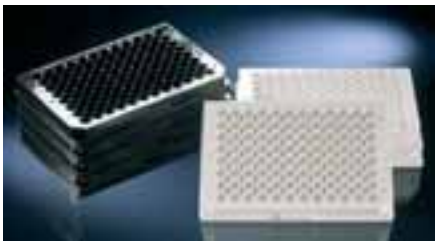
PS, clear, untreated

Used in many fields including antibiotic screening, serological testing, storing and screening of compounds, and DNA libraries.

- Raised well rims and corresponding condensation rings on the lid prevent cross-contamination and evaporation
- Optimised for robotics, automated readers and liquid handling systems
- Flat bottom shape is ideal for microscopic and optical measurements
- Conical well shape maximises sample recovery
- Barcoded version also available

Description	Well volume	Sterile	Packed	Pk	Cat. No.
Flat bottom wells, F96, with lid	400 µl	+	10/pack	160	**732-2719**
Flat bottom wells, F96, with lid	400 µl	-	10/pack	160	**732-2721**
Flat bottom wells, F96, with lid, with barcode	400 µl	+	10/pack	160	**732-2720**
Flat bottom wells, F96, without lid	400 µl	+	1/pack	50	**732-2747**
Flat bottom wells, F96, without lid	400 µl	+	10/pack	180	**732-2715**
Flat bottom wells, F96, without lid	400 µl	-	10/pack	180	**732-2717**
Flat bottom wells, F96, without lid, with barcode	400 µl	-	10/pack	180	**732-2718**
Flat bottom wells, F96, without lid	400 µl	-	25/pack	60	**732-2746**
Conical bottom wells, V96, with lid	300 µl	+	1/pack	50	**734-0491**
Conical bottom wells, V96, without lid	300 µl	-	10/pack	180	**732-0191**
Conical bottom wells, V96, without lid	300 µl	+	1/pack	50	**732-2702**
Conical bottom wells, V96, with lid	300 µl	+	10/pack	80	**738-1003**
Conical bottom wells, V96, without lid	300 µl	+	10/pack	80	**738-1004**
Conical-bottom wells, V96, with lid	300 µl	+	10/pack	160	**732-0812**
Round bottom wells, U96, without lid	300 µl	+	1/pack	50	**732-2725**
Round bottom wells, U96, without lid	300 µl	-	10/pack	180	**732-2744**

Plates, 96-MicroWell™, FluoroNunc™ and LumiNunc™
Thermo Scientific



PS, tissue culture-treated, sterile, with lid

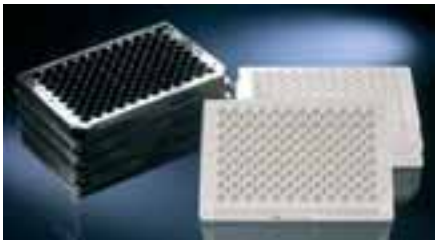
96-MicroWell™ plates for fluorescence and luminescence based cell assays. Black plates for fluorescence reading with minimum back-scattered light and background fluorescence. White plates for luminescence with maximum reflection and minimal autoluminescence.

- Raised well rims reduce risk of cross-contamination
- Flat (F) bottom wells for optimum optical characteristics
- Plate edges and lids designed to reduce evaporation
- Plates fit all standard equipment
- Nunclon™Δ certified treated surface

Recommended working volume: 200 µl per well

Description	Colour	No. of wells	Sterile	Pk	Cat. No.
LumiNunc™ F96-MicroWell™ plate, individually wrapped	White	96	+	50	**734-2002**
LumiNunc™ F96-MicroWell™ plate	White	96	+	160	**734-2003**
FluoroNunc™ F96-MicroWell™ plate, individually wrapped	Black	96	+	50	**734-2017**
FluoroNunc™ F96-MicroWell™ plate	Black	96	+	160	**734-2018**

Plates, 96-MicroWell™, FluoroNunc™ and LumiNunc™
Thermo Scientific



PS, untreated, pinchbar design

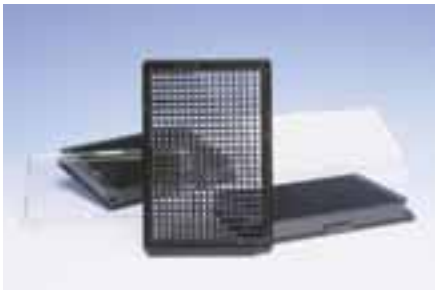
96-MicroWell™ plates for fluorescence and luminescence based assays. Black plates for fluorescence reading with minimum back-scattered light and background fluorescence. White plates for luminescence with maximum reflection and minimal autoluminescence.

- Raised well rims reduce risk of cross-contamination
- Flat (F) bottom wells for optimum optical characteristics
- Plates fit all standard equipment
- Compatible with lids for MicroWell™ plates and adhesive sealing tape

Recommended working volume: 200 µl per well

Description	Colour	No. of wells	Sterile	Pk	Cat. No.
LumiNunc™ F96-MicroWell™ plate, with lid, sterile	White	96	+	50	**732-2696**
LumiNunc™ F96-MicroWell™ plate, with lid, sterile	White	96	+	160	**732-2697**
LumiNunc™ F96-MicroWell™ plate, without lid, non sterile	White	96	-	180	**732-2698**
FluoroNunc™ F96-MicroWell™ plate, with lid, sterile	Black	96	+	50	**732-2699**
FluoroNunc™ F96-MicroWell™ plate, with lid, sterile	Black	96	+	160	**732-2700**
FluoroNunc™ F96-MicroWell™ plate, without lid, non sterile	Black	96	-	180	**732-2701**

Optical bottom plates, 96- and 384-well, Nunc™
Thermo Scientific



PS upper structure with either PS film or no. 1.5 coverglass base

Designed for fluorescence and luminescence based assays, these plates have white or black upper structures with optically clear bottoms. Consequently, they can be read from bottom and top, or both.

- Compatible with automated handling equipment
- Alphanumeric well identification
- Optimised for scintillation counting
- Low fluorescence background ensures accurate results, due to higher signal-to-noise ratios

Description	Recommended working volume (µl)	No. of wells	Sterile	Pk	Cat. No.
96-well optical bottom plate, untreated, without lid, non sterile					
Black upper structure with coverglass base	200	96	-	30	**732-2740**
Black upper structure with PS film base	200	96	-	30	**732-2741**
White upper structure with PS film base	200	96	-	30	**732-2742**

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Description	Recommended working volume (µl)	No. of wells	Sterile	Pk	Cat. No.
384-well optical bottom plate, untreated, without lid, non sterile					
Black upper structure with coverglass base	10 - 100	384	-	30	**734-2178**
White upper structure with PS film base	10 - 100	384	-	30	**734-2180**
Black upper structure with PS film base	10 - 100	384	-	30	**734-2181**
384-well optical bottom plate, Nunclon™Δ treated, with lid, sterile					
Black upper structure with PS film base	10 - 100	384	+	30	**734-2031**
White upper structure with PS film base	10 - 100	384	+	30	**734-2032**
Black upper structure with coverglass base	10 - 100	384	+	30	**734-2086**
384-well optical bottom plate, Nunclon™Δ treated, without lid, sterile					
Black upper structure with PS film base	10 - 100	384	+	30	**734-1191**

Microplates for fluorescence applications
Thermo Scientific

Designed specifically for fluorescence applications, this range of products have binding surfaces that include Microfluor® and universal binding (UB) and are available with either black or white pigmentation depending on the specific assay requirements.

Black microplates have reduced background signal to improve assay sensitivity with minimised crosstalk, while avoiding light piping between the wells. They are available in high and medium binding configurations:

Microfluor® 1 Black and Black UB microplates offer low background.

Microfluor® 2 Black are irradiated microplates that provide higher binding and minimal background fluorescence.

White microplates have higher reflectivity to enhance signal and thus sensitivity, while improving signal-to-noise ratios, thus increasing the dynamic range and minimising crosstalk. They are available in high and medium binding configurations:

Microfluor® 1 White microplates offer high signal reflectance and reduced background fluorescence.

Microfluor® 2 White is an irradiated microplate for assays that require higher binding and reduced background for fluorescence assays in the ultraviolet range.

- Available in 96-well or strip plate format for matching to the requirements of automated instruments
- Microfluor® microplates have raised wells to avoid cross-contamination

Description	Colour	No. of wells	Pk	Cat. No.
Microfluor® microplates, 96-well				
Microfluor® 1 black plate, flat bottom wells	Black	96	50	**735-0527**
Microfluor® 1 white plate, flat bottom wells	White	96	50	**735-0528**
Microfluor® 2 black plate, flat bottom wells	Black	96	50	**735-0529**
Microfluor® 2 white plate, flat bottom wells	White	96	50	**735-0530**
Black microplates, 96-well				
Universal binding (UB), flat bottom wells	Black	96	50	**735-0533**

Description	Pk	Cat. No.
Accessories		
Microplate lid, sterile, individually wrapped (type A)	50	**735-0488**

White microplates for luminescence applications
Thermo Scientific

Microlite™ microplates are densely pigmented to minimise crosstalk and to provide high reflectivity. These characteristics are ideal for intense luminescent reactions where light piping may be a concern or minimal luminescence assays where even a minute amount of light could affect results.

Microlite™ 1+ is the ideal vessel for low signal luminescent reactions, offering medium binding with enhanced dynamic range, extra high reflectivity and minimal crosstalk.

Microlite™ 2+ is an irradiated, high binding surface with enhanced dynamic range, extra high reflectivity and minimal crosstalk for low signal luminescent reactions.

- Microlite™+ surface offers minimum crosstalk and extra high reflectivity
- Choice of 96-well or strip plate format
- Flat bottom wells for optimum optical characteristics

Description	Pk	Cat. No.
Microlite™+ microplates, 96-well		
Microlite™ 1+	50	**735-0525**
Microlite™ 2+	50	**735-0526**

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Description	Pk	Cat. No.
Microlite™+ strips		
Microlite™ 1+ strip, 1×12 per strip	320	**735-0523**
Microlite™ 2+ strip, 1×12 per strip	320	**735-0524**

Microplates, streptavidin coated, BioBind™
Thermo Scientific

96-well streptavidin coated microplates offer a universal surface for binding a wide range of molecules.

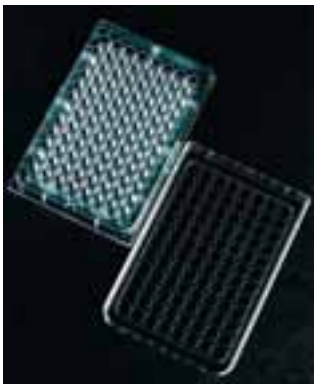
The biotin-streptavidin interaction is extremely strong, allowing simple and stable binding of DNA, peptides, polysaccharides and other biotin conjugates to the polystyrene well surface. This prevents the problems associated with steric hindrance and hydrophilic molecules.

- Streptavidin coating is ideal for use with molecules that adsorb poorly to polystyrene, or denature upon adsorption, as it gives stable, highly specific binding with low background binding
- Flat bottom wells for optimum optical characteristics

Description	No. of wells	Pk	Cat. No.
Solid BioBind™ strip, assembled in frame, 1×8 per strip	96	5	**735-0541**
Breakable BioBind™ strip, assembled in frame, 1×8 per strip	96	5	**735-0544**

IVD

Microtitre plates, 96-well, Sterilin®
Thermo Scientific



PS, non-treated

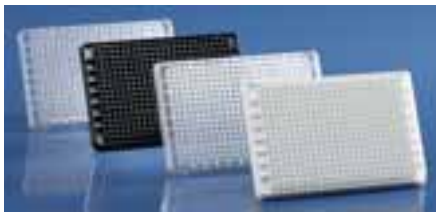
Used for serology and microbiology. Compatible with automated plate readers and washers.

- Suitable for use at a wavelength of 340 nm
- Condensation rings on the lid together with raised well rims on the base help minimise the risk of contamination from surrounding wells
- Frosted write-on area on end wall, orientation corners and alpha numeric labelling ensure easy sample identification
- Hanging well design ensures even temperature distribution around each well

Colour: Clear

Description	Well volume (µl)	No. of wells	Sterile	Pk	Cat. No.
96-well plate, flat-bottomed	400	96	-	50	**734-0481**
96-well plate, U-bottomed	330	96	-	50	**634-0008**
96-well plate, V-bottomed	310	96	-	50	**634-0009**
96-well plate, flat-bottomed	400	96	+	50	**734-0482**
96-well plate, U-bottomed	330	96	+	50	**634-0010**
96-well plate, V-bottomed	310	96	+	50	**734-0483**

384-well (HTS) microplates, non treated, BRANDplates®
Brand



PS

These flat bottom plates are available black, white or transparent.

pureGrade™

Non treated, medium binding surface, non sterile. These plates are suitable for homogeneous assays, screening and storage.

pureGrade™ S

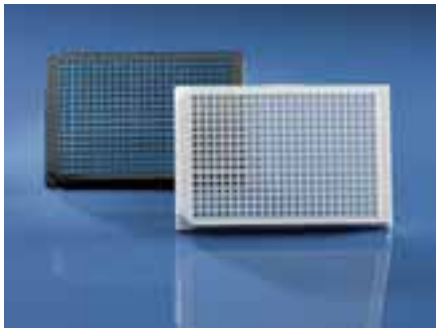
Non treated, medium binding surface, sterile. Sterilised by β radiation, these plates are especially well suited for bacteriological assays.

- All BRANDplates® are alphanumerically labelled, stackable and compatible with most standard microplate readers and washers
- White plates provide maximum reflection and minimum crosstalk during luminescence measurements; black plates provide minimum back light scatter during fluorescence analyses
- Sterile plates are supplied individually wrapped with lid

BRANDplates® are non cytotoxic according to ISO 10993-5, free of endotoxins (<0,01 EU/ml), and free from DNA, DNase and RNase. Sterile products comply with ISO 11137 and AAMI guidelines.

Description	Colour	Well volume (µl)	Sterile	Pk	Cat. No.
pureGrade™					
Standard plate with F-bottom	Clear	100	-	50	**735-2010**
Standard plate with F-bottom	White	100	-	50	**735-2011**
Standard plate with F-bottom	Black	100	-	50	**735-2012**
Transparent base with F-bottom	White/Clear	120	-	50	**735-2016**
Transparent base with F-bottom	Black/Clear	120	-	50	**735-2017**
pureGrade™ S					
Standard plate with F-bottom	Clear	100	+	50	**735-2030**
Standard plate with F-bottom	White	100	+	50	**735-2031**
Standard plate with F-bottom	Black	100	+	50	**735-2032**
Transparent base with F-bottom	White/Clear	120	+	50	**735-2036**
Transparent base with F-bottom	Black/Clear	120	+	50	**735-2037**

384-well microplates for immunology, BRANDplates®
Brand



PS, solid or with transparent base

These flat bottom plates are available in different colours, and with standard or transparent base formats.

immunoGrade™

The surface of these plates is optimised for the immobilisation of IgG, showing a high binding capacity for molecules with hydrophilic and hydrophobic regions. Plates with an immunoGrade™ surface are the best choice for standard ELISA applications.

hydroGrade™

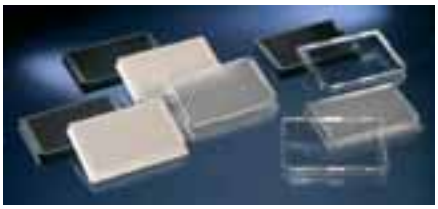
Strongly hydrophilic surface. Especially well suited for binding molecules with predominantly hydrophilic regions. Plates with a hydroGrade™ surface can be used in liquid phase assays with hydrophobic components.

lipoGrade™

Strongly hydrophobic (lipophilic) surface. Especially suitable for binding molecules with hydrophobic regions. Microplates with lipoGrade™ surfaces can be used in liquid phase assays with hydrophilic components.

Description	Colour	Well volume (µl)	Pk	Cat. No.
immunoGrade™				
Standard plate with F-bottom	Clear	100	50	**735-2051**
Standard plate with F-bottom	White	100	50	**735-2052**
Standard plate with F-bottom	Black	100	50	**735-2053**
hydroGrade™				
Standard plate with F-bottom	Clear	100	50	**735-2061**
Standard plate with F-bottom	White	100	50	**735-2062**
Standard plate with F-bottom	Black	100	50	**735-2063**
lipoGrade™				
Standard plate with F-bottom	Clear	100	50	**735-2074**
Standard plate with F-bottom	White	100	50	**735-2075**
Standard plate with F-bottom	Black	100	50	**735-2076**
Transparent base with F-bottom	White/Clear	120	50	**735-2080**
Transparent base with F-bottom	Black/Clear	120	50	**735-2081**

Plates, 384-well, non treated, Nunc™
Thermo Scientific



PS

Designed for DNA libraries and high throughput screening applications. Clear plates suitable for colorimetric assays and sample storage, white plates for luminescence and fluorescence assays, and black plates for fluorescence assays.

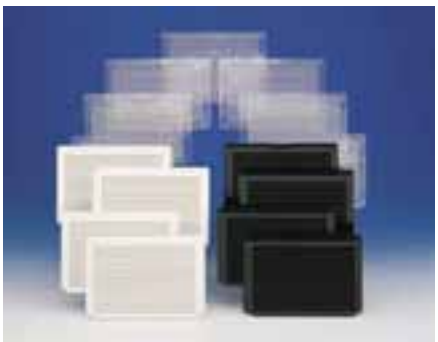
- Rounded square well geometry reduces the risk of well-to-well contamination
- Flat bottom wells for optical reading
- Standard footprint compatible with automated handling systems
- Working range: 10 - 100 µl per well
- Clear plates available sterile or non sterile

External dimensions: 128×86 mm

Total well volume: 120 µl

Description	Colour	No. of wells	Sterile	Pk	Cat. No.
384-well plate, sterile, with lid, 10 per bag	Clear	384	+	30	**736-0192**
384-well plate, sterile, with lid, individually wrapped	Clear	384	+	30	**734-2182**
384-well plate, non sterile, without lid	Clear	384	-	100	**732-2724**
384-well plate, non sterile, without lid	Black	384	-	100	**732-2726**
384-well plate, non sterile, without lid	White	384	-	100	**732-2727**

Immunology plates, 384-well, MaxiSorp™, Nunc™
Thermo Scientific



PS, with certified MaxiSorp™ surface treatment, pinchbar design

Available with a choice of clear plates for colorimetric assays and sample storage; white plates for luminescence and fluorescence assays; and black plates for fluorescence assays.

- Same footprint as standard 96-well plate
- White and black plates minimise crosstalk
- Rounded square wells eliminate wicking
- Flat bottom for optical reading
- Compatible with automated readers and liquid handling systems

Working range: 10 - 100 µl per well

Description	Colour	No. of wells	Pk	Cat. No.
MaxiSorp™, white	White	384	30	**735-0035**
MaxiSorp™, black	Black	384	30	**735-0036**
MaxiSorp™, clear	Clear	384	30	**735-0114**

384-well microplates, clear bottom, Falcon® Optilux
Corning®

PS, tissue culture-treated, sterile, with lid

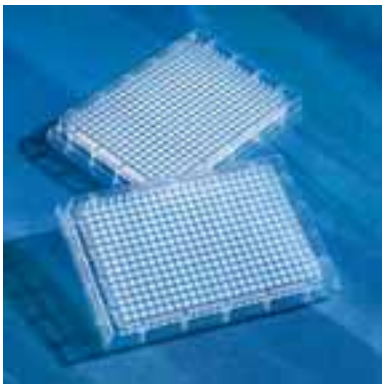
These flat-bottom 120 µl microplates are suitable for a wide variety of applications, including high throughput screening.

- Standard microplate footprint meets SBS specification
- Rounded square well geometry reduces wicking
- Tissue culture-treated for optimum cell attachment and growth

Description	Pk	Cat. No.
Black/clear 384-well plates	50	**736-2044**
White/clear 384-well plates	50	**736-2045**

Description	Pk	Cat. No.
Accessories		
Plate lid, PS, for 384-well, 96-well black, and Falcon® Optilux microplates, non sterile	50	**736-2042**

Clear polystyrene microplates, 384-well
Corning®

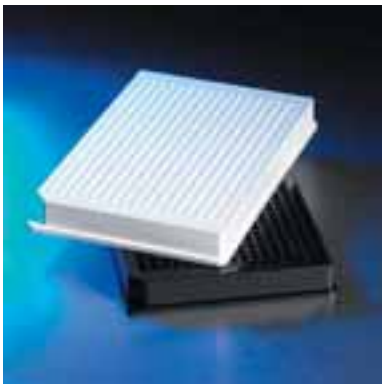


PS, flat bottom

- Total well volume of 112 µl; working well volume of 20 to 80 µl
- Cell culture plates sterilised by gamma radiation and certified non pyrogenic
- Universal optics NBS™ plate manufactured using an advanced polymer with high clarity and improved chemical resistance
- Lids supplied with sterile plates, other lids can be ordered separately

Description	Colour	Sterile	Pk	Cat. No.
Standard plate with barcode labels, NBS™ non binding surface	Clear	-	100	**734-4116**
Standard plate, NBS™ non binding surface	Clear	-	100	**732-5520**
Standard plate with lid, non treated	Clear	+	100	**732-5536**
Standard plate, high binding surface	Clear	-	100	**732-5537**
Standard plate with lid, TC treated	Clear	+	100	**732-5538**
Standard plate with barcode labels, non treated	Clear	-	100	**734-4121**
Standard plate, non treated	Clear	-	100	**732-5539**

Solid black and white polystyrene microplates, 384-well
Corning®



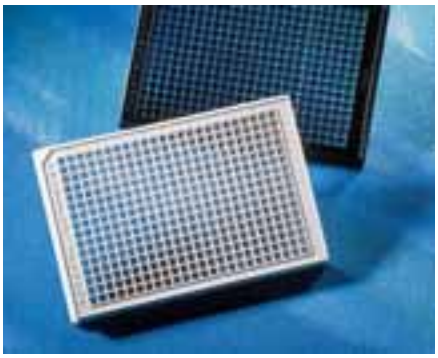
PS

Designed to reduce well-to-well crosstalk during fluorescent and luminescent assays.

Description	Colour	No. of wells	Sterile	Pk	Cat. No.
Low volume, flat bottom, NBS™ non binding surface	White	384	-	50	**734-4146**
Low volume, flat well bottom, NBS™ non binding surface	Black	384	-	50	**734-4142**
Low volume, flat well bottom, non treated	Black	384	-	50	**734-4143**
Low volume, round well bottom, High Bind surface	Black	384	-	100	**732-5535**
Low volume, round well bottom, NBS™ non binding surface	White	384	-	100	**732-5531**
Low volume, round well bottom, NBS™ non binding surface	Black	384	-	100	**732-5533**
Low volume, round well bottom, non treated	White	384	-	100	**732-5532**
Low volume, round well bottom, non treated	Black	384	-	100	**732-5534**
Low volume with barcode label, flat bottom, NBS™ non binding surface	White	384	-	50	**734-4147**
Low volume with barcode label, flat well bottom, non treated	Black	384	-	50	**734-4144**
Low volume with lid, flat bottom, TC treated	Black	384	+	50	**734-4145**
Low volume with lid, flat bottom, TC treated	White	384	+	50	**734-4149**
Low volume with lid and barcode label, flat bottom, TC treated	White	384	+	50	**734-4150**
Standard plate, low flange, flat well bottom, High Bind surface	Black	384	-	50	**734-4113**
Standard plate, low flange, flat well bottom, NBS™ non binding surface	White	384	-	50	**734-4108**
Standard plate, low flange, flat well bottom, NBS™ non binding surface	Black	384	-	50	**734-4110**
Standard plate, low flange, flat well bottom, non treated	White	384	-	50	**734-4106**
Standard plate, low flange, flat well bottom, non treated	Black	384	-	50	**734-4107**
Standard plate, low flange with barcode label, flat well bottom, NBS™ non binding surface	White	384	-	50	**734-4109**
Standard plate, low flange with barcode label, flat well bottom, NBS™ non binding surface	Black	384	-	50	**734-4111**
Standard plate, low flange with square wells and flat well bottom, High Bind surface	White	384	-	50	**734-4112**
Standard plate with lid, flat well bottom, TC treated	White	384	+	50	**734-4104**
Standard plate with lid, flat well bottom, TC treated	Black	384	+	50	**734-4105**
Standard plate with lid, flat well bottom, TC treated, with barcode label	White	384	+	50	**738-0148**

Clear bottom, black and white, polystyrene microplates, 384-well

Corning®



PS, flat bottom

Suitable for fluorescent and luminescent assays using either top or bottom detection plate readers.

Description	Colour	Well volume (µl)	Sterile	Pk	Cat. No.
Standard plate, NBS™ non binding surface	White/Clear	112	-	100	**732-5525**
Standard plate, NBS™ non binding surface, with barcode	White/Clear	112	-	100	**738-0134**
Standard plate, NBS™ non binding surface	Black/Clear	112	-	100	**732-5527**
Standard plate, CellBIND® surface, with lid	Black/Clear	112	+	50	**736-0203**
Standard plate, non treated	White/Clear	112	-	100	**734-1634**
Standard plate, non treated	Black/Clear	112	-	100	**734-1639**
Standard plate, TC treated, with lid	White/Clear	112	+	100	**734-1635**
Standard plate, TC treated, with lid	Black/Clear	112	+	100	**734-1640**
Black optical imaging plate with clear bottom, TC treated, with lid	Black/Clear	112	+	100	**734-1200**
Black optical imaging plate with clear bottom, TC treated, with barcode, with lid	Black/Clear	112	+	100	**734-4168**
Low volume, NBS™ non binding surface	Black/Clear	50	-	50	**734-4088**
Low volume, TC treated, with lid	Black/Clear	50	+	50	**734-4087**
Low volume, non treated	Black/Clear	50	-	50	**734-4086**
Low volume, poly-D-lysine treated, with lid	Black/Clear	50	+	50	**734-4118**

384-well plates, fibronectin coated

Corning®

PS, fibronectin coated, with lid

Flat bottomed plates suitable for high throughput applications.

Description	Pk	Cat. No.
384-well plate, clear, fibronectin coated, with lid	100	**738-0152**
384-well plate, black frame with clear well bottom, fibronectin coated, with lid	100	**738-0153**

384-well plates, collagen coated

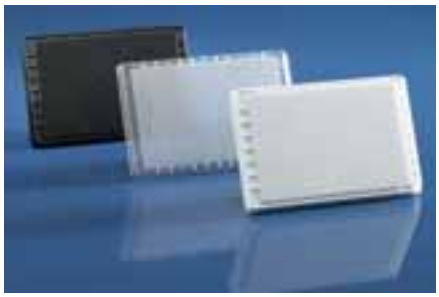
Corning®

PS, black plate with clear wells, collagen coated, with lid

Suitable for high throughput applications, these 384-well plates are compatible with leading plate readers.

Description	Pk	Cat. No.
384-well plate, black with clear wells, collagen coated, with lid	100	**738-0151**

1536-well (UHTS) microplates, non treated, BRANDplates®
Brand



PS

These flat bottom plates are available sterile or non sterile.

pureGrade™

Non treated, medium binding, non sterile surface. These plates are suitable for homogeneous assays, screening and storage.

pureGrade™ S

Non treated, medium binding, sterile surface. Sterilised by β radiation, these plates are especially well suited for bacteriological assays.

- All BRANDplates® are alphanumerically labelled, stackable and compatible with most standard microplate readers and washers
- White plates provide maximum reflection and minimum crosstalk during luminescence measurements; black plates provide minimum back light scatter during fluorescence analyses
- Sterile plates are supplied individually wrapped with lid

BRANDplates® are non cytotoxic according to ISO 10993-5, free of endotoxins (<0,01 EU/ml), and free of DNA, DNase and RNase. All sterile products comply with ISO 11137 and AAMI guidelines.

Description	Colour	Well volume (µl)	Sterile	Pk	Cat. No.
pureGrade™					
Standard plate with F-bottom	Clear	10	-	50	**735-2019**
Standard plate with F-bottom	White	10	-	50	**735-2020**
Standard plate with F-bottom	Black	10	-	50	**735-2021**
pureGrade™ S					
Standard plate with F-bottom	Clear	10	+	50	**735-2039**
Standard plate with F-bottom	White	10	+	50	**735-2040**
Standard plate with F-bottom	Black	10	+	50	**735-2041**

Standard polystyrene microplates, 1536-well
Corning®

PS

These microplates conform to standard microplate footprint and dimensions, and are available in solid black or white, with round or flat bottoms, or in black clear bottom formats.

- Total well volume of 10 µl for round well plates and 12,8 µl for flat bottom plates
- Recommended working volume of up to 8 µl
- Round well bottoms for reduced air entrapment and improved CVs and Z factor
- Raised well bottoms for higher sensitivity
- Lids available separately

Description	Colour	No. of wells	Sterile	Pk	Cat. No.
Standard plate with barcode label, flat bottom, non treated	Black	1536	-	50	**734-4126**
Standard plate, flat bottom, non treated	Black	1536	-	50	**734-4125**
Standard plate with barcode label, flat bottom, non treated	White	1536	-	50	**734-4128**
Standard plate, flat bottom, non treated	White	1536	-	50	**734-4127**
Standard plate with lid and barcode label, flat bottom, TC treated	Black	1536	+	50	**738-0149**
Standard plate with lid, flat bottom, TC treated	Black	1536	+	50	**734-4129**
Standard plate with lid and barcode label, flat bottom, TC treated	White	1536	+	50	**734-4131**
Standard plate with lid, flat bottom, TC treated	White	1536	+	50	**734-4130**
Standard plate with barcode labels, flat bottom, NBS™ non binding surface	Black	1536	-	50	**734-4133**
Standard plate, flat bottom, NBS™ non binding surface	Black	1536	-	50	**734-4132**
Standard plate with barcode label, flat bottom, NBS™ non binding surface	White	1536	-	50	**734-4135**
Standard plate, flat bottom, NBS™ non binding surface	White	1536	-	50	**734-4134**
Standard plate with lid and barcode label, flat bottom, cellBIND® surface	White	1536	+	50	**738-0150**
Clear bottom plate with barcode labels, flat bottom, non treated	Black/Clear	1536	-	50	**734-4162**
Clear bottom plate, flat bottom, non treated	Black/Clear	1536	-	50	**734-1198**
Clear bottom plate with lid and barcode label, flat bottom, TC treated	Black/Clear	1536	+	50	**734-4163**
Clear bottom plate with lid, flat bottom, TC treated	Black/Clear	1536	+	50	**734-1199**

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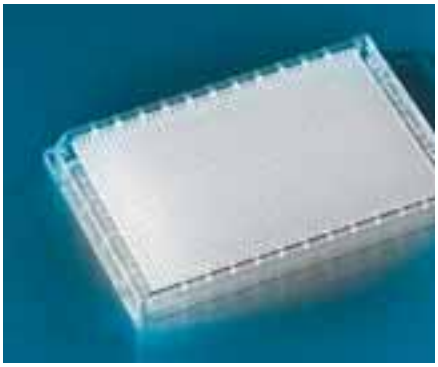
Description	Colour	No. of wells	Sterile	Pk	Cat. No.
Clear bottom plate, flat bottom, NBS™ non binding surface	Black/Clear	1536	-	50	**734-4164**
Standard plate, round bottom, non treated	Black	1536	-	50	**734-1670**
Standard plate, round bottom, non treated	White	1536	-	50	**734-1671**

Echo™ qualified COC microplate, 1536-well
Corning®



Cyclic Olefin Copolymer (COC)

Developed to deliver optimal acoustic performance on the Labcyte Echo 550 Compound Reformatter.

- Plates lot tested and certified to meet performance specifications
- Enhanced flatness provides low intra- and inter-plate CVs
- Low flange base is designed for barcode customisation and robotic handling

Description	Colour	No. of wells	Sterile	Pk	Cat. No.
Flat well bottom COC plate, non-treated surface	Transparent	1536	-	50	**734-4136**

Plates, Nunc™ OmniTrays
Thermo Scientific

PS, sterile, with lid

Useful for screening libraries and for DNA hybridisation methods, these 90 ml trays are also suitable for standard Petri dish techniques and bacterial growth.

- Compatible with robotic systems
- Sturdy wall design facilitates handling and stacking
- Can be frozen at –20 °C

External dimensions: 128×86 mm

Recommended working volume: 35 ml

Description	Sterile	Pk	Cat. No.
OmniTray with lid	+	60	**734-0490**
OmniTray with lid	+	90	**732-2735**

PALL Life Sciences

Filter plates, 96-well, for multiplexing, AcroPrep™ Advance

The AcroPrep™ Advance filter plate portfolio includes a variety of membrane types and pore sizes to provide the best possible performance for a wide range of sample preparation and high throughput screening applications. AcroPrep™ Advance filter plates are ideal for concentration, purification and desalting of proteins and peptides; bead and chromatography resin-based applications; gross fractionation and lysate clarification; and general filtration.

AcroPrep™ Advance 96-well filter plates for multiplexing

Applications include bead-based multiplexing assays and flow cytometry.

- Smooth well wall provides efficient bead recovery, ensuring reproducible results
- High performance membrane - does not trap microspheres in the membrane matrix
- Low levels of false positives - in serological assays, Supor® membrane effectively removes IgG complexes, thus reducing non-specific reactivity of the microspheres
- Well geometry results in faster, more uniform filtration rates across the plate with reduced hold-up volume; outlet tip geometry minimises sample leakage and loss during incubation steps so that acquisition times are not affected
- Low non-specific binding - intrinsic plate and membrane properties minimise target loss

Dimensions	
Length:	128 mm
Width:	86 mm
Height (with lid):	18 mm
Height (without lid):	14 mm
Well bottom area:	0,25 cm^2
Recommended operating vacuum:	≥254 mm Hg
Recommended centrifugal force:	1500 ×g
Typical processing time:	Vacuum: 2 seconds Centrifuge: <2 minutes
Typical hold-up volume:	Vacuum: 5 µl Centrifuge: 3 µl
Materials of construction:	Filter media: PP/PE non-woven membrane and Supor® (polyethersulfone) membrane Plate housing: PP Lid: PS

Description	Well volume (µl)	Recommended working volume (µl)	Pk	Cat. No.
AcroPrep™ Advance, 350 µl, 0,2 µm Supor® membrane	350	≤300	10	**518-0022**
AcroPrep™ Advance, 350 µl, 0,45 µm Supor® membrane	350	≤300	10	**518-0023**
AcroPrep™ Advance, 350 µl, 1,2 µm Supor® membrane	350	≤300	10	**738-0111**
AcroPrep™ Advance, 350 µl, 30 - 40 µm PP/PE media	350	≤300	10	**518-0025**

PALL Life Sciences

Filter plates, 96-well, for protein purification, AcroPrep™ Advance

The AcroPrep™ Advance filter plate portfolio includes a variety of membrane types and pore sizes to provide the best possible performance for a wide range of sample preparation and high throughput screening applications. AcroPrep™ Advance filter plates are ideal for concentration, purification and desalting of proteins and peptides; bead and chromatography resin-based applications; gross fractionation and lysate clarification; and general filtration.

AcroPrep™ Advance 96-well filter plates for protein purification

Application include high throughput protein purification, screening of chromatography resins, screening of chromatography conditions, protein fractionation, and antibody purification.

- Supor® membrane offers optimal support to retain chromatography resins whilst allowing smooth flow of buffers; Mustang® membrane is able to withstand high flow rates to render fast purification of biomolecules
- Well geometry results in faster, more uniform filtration rates across the plate with reduced hold-up volume
- Outlet tip geometry minimises sample leakage and loss during incubation steps
- Low non-specific binding - intrinsic plate properties prevent target molecules from binding to the plate

Dimensions	
Length:	128 mm
Width:	86 mm
Height (with lid):	18 mm (350 µl only)
Height (without lid):	14 mm (350 µl); 33 mm (1 ml)
Well bottom area:	0,25 cm^2
Recommended operating vacuum:	≥254 mm Hg
Recommended centrifugal force:	1500 ×g

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Typical processing time:	518-0024, 738-0117, 738-0118 Vacuum: 2 seconds Centrifuge: <2 minutes 738-0113, 738-0114, 738-0127, 738-0128 Vacuum: 14 seconds Centrifuge: <2 minutes
Typical hold-up volume:	518-0024, 738-0117, 738-0118 Vacuum: 5 µl Centrifuge: 3 µl 738-0113, 738-0114, 738-0127, 738-0128 Vacuum: 21 µl Centrifuge: 12 µl
Materials of construction:	Filter media: Supor® (polyethersulfone), Mustang® Q (anion exhange), and Mustang® S (cation exchange) membranes Plate housing: PP Lid: P

Description	Well volume (µl)	Recommended working volume (µl)	Pk	Cat. No.
AcroPrep™ Advance, 350 µl, 1,2 µm Supor® membrane	350	≤300	10	**518-0024**
AcroPrep™ Advance, 350 µl, Mustang® Q membrane	350	≤300	10	**738-0113**
AcroPrep™ Advance, 350 µl, Mustang® S membrane	350	≤300	10	**738-0114**
AcroPrep™ Advance, 1 ml, 0,45 µm Supor® membrane	1000	≤900	5	**738-0117**
AcroPrep™ Advance, 1 ml, 1,2 µm Supor® membrane	1000	≤900	5	**738-0118**
AcroPrep™ Advance, 1 ml, Mustang® Q membrane	1000	≤900	5	**738-0127**
AcroPrep™ Advance, 1 ml, Mustang® S membrane	1000	≤900	5	**738-0128**

PALL Life Sciences

Filter plates, 96-well, for lysate clearance, AcroPrep™ Advance

The AcroPrep™ Advance filter plate portfolio includes a variety of membrane types and pore sizes to provide the best possible performance for a wide range of sample preparation and high throughput screening applications. AcroPrep™ Advance filter plates are ideal for concentration, purification and desalting of proteins and peptides; bead and chromatography resin-based applications; gross fractionation and lysate clarification; and general filtration.

AcroPrep™ Advance 96-well filter plates for lysate clearance

Applications include removal of bacterial debris prior to plasmid purification, removal of bacterial and cellular debris prior to protein purification, and clearance of gross particulates.

- Integrated prefilter yields consistent filtration of samples with high levels of gross particulate
- Well geometry results in faster, more uniform filtration rates across the plate with reduced hold-up volume
- Output tip geometry provides direct flow of samples into receiver plate without concerns about cross-contamination
- Biologically inert materials allows clarification of most types of lysates without loss of target molecules

Dimensions	
Length:	128 mm
Width:	86 mm
Height (with lid):	18 mm (350 µl only)
Height (without lid):	14 mm (350 µl); 33 mm (1 ml); 47 mm (2 ml)
Well bottom area:	0,25 cm^2
Recommended operating vacuum:	≥254 mm Hg
Recommended centrifugal force:	1500 ×g
Typical processing time:	518-0030 Vacuum: 2 seconds Centrifuge: <2 minutes 518-0031, 738-0129, 738-0133 Vacuum: 9 seconds Centrifuge: <2 minutes
Typical hold-up volume:	518-0030 Vacuum: 17 µl 518-0031, 738-0129, 738-0133 Vacuum: 13 µl
Materials of construction:	Filter media: 3 µm glass fibre/0.2 µm Supor® membrane and 3 µm glass fibre/1.2 µm Supor® membrane Plate housing: PP Lid: P

Description	Well volume (µl)	Recommended working volume (µl)	Pk	Cat. No.
AcroPrep™ Advance, 350 µl, 3,0 µm glass fibre/1,2 µm Supor® membrane	350	≤300	10	**518-0030**
AcroPrep™ Advance, 350 µl, 3,0 µm glass fibre/0,2 µm Supor® membrane	350	≤300	10	**518-0031**
AcroPrep™ Advance, 1 ml, 3,0 µm glass fibre/0,2 µm Supor® membrane	1000	≤900	5	**738-0129**
AcroPrep™ Advance, 2 ml, 3,0 µm glass fibre/0,2 µm Supor® membrane	2000	≤1900	5	**738-0133**

PALL Life Sciences

Filter plates, 96-well, for ultrafiltration, AcroPrep™ Advance

The AcroPrep™ Advance filter plate portfolio includes a variety of membrane types and pore sizes to provide the best possible performance for a wide range of sample preparation and high throughput screening applications. AcroPrep™ Advance filter plates are ideal for concentration, purification and desalting of proteins and peptides; bead and chromatography resin-based applications; gross fractionation and lysate clarification; and general filtration.

AcroPrep™ Advance 96-well filter plates for ultrafiltration

Applications include size exclusion, PCR clean-up, nucleic acid purification, and protein separation.

- High biomolecule recovery - Omega® membrane typically results in ≥90% recovery of target biomolecules
- Well geometry results in faster, more uniform filtration rates across the plate with reduced hold-up volume for maximum sample recovery
- Low non specific binding - intrinsic plate and membrane properties prevent target molecules from binding to the plate

Dimensions	
Length:	128 mm
Width:	86 mm
Height (with lid):	18 mm (350 µl only)
Height (without lid):	14 mm (350 µl); 33 mm (1 ml)
Well bottom area:	0,25 cm^2
Recommended operating vacuum:	≥254 mm Hg
Recommended centrifugal force:	1500 ×g
Typical vacuum filtration performance:	10K Omega: processing time 20 mins; hold up volume 5 µl 30K Omega: processing time 8 mins; hold up volume 6 µl 100K Omega: processing time 4 mins; hold up volume 7 µl
Typical centrifugal filtration performance:	3K Omega: processing time 45 mins; hold up volume 2 µl 10K Omega: processing time 8 mins; hold up volume 2 µl 30K Omega: processing time 8 mins; hold up volume 2 µl 100K Omega: processing time 5 mins; hold up volume 2 µl
Materials of construction:	Filter media: Omega® (modified polyethersulfone) membrane Plate housing: PP Lid: PS

Description	Well volume (µl)	Recommended working volume (µl)	Pk	Cat. No.
AcroPrep™ Advance, 350 µl, Omega™ 3K MWCO	350	≤300	10	**518-0027**
AcroPrep™ Advance, 350 µl, Omega™ 10K MWCO	350	≤300	10	**518-0032**
AcroPrep™ Advance, 350 µl, Omega™ 30K MWCO	350	≤300	10	**518-0028**
AcroPrep™ Advance, 350 µl, Omega™ 100K MWCO	350	≤300	10	**518-0029**
AcroPrep™ Advance, 1 ml, Omega™ 3K MWCO	1000	≤900	5	**738-0123**
AcroPrep™ Advance, 1 ml, Omega™ 10K MWCO	1000	≤900	5	**738-0124**
AcroPrep™ Advance, 1 ml, Omega™ 30K MWCO	1000	≤900	5	**738-0125**
AcroPrep™ Advance, 1 ml, Omega™ 100K MWCO	1000	≤900	5	**738-0126**

PALL Life Sciences

Filter plates, 96-well, for solvent filtration, AcroPrep™ Advance

The AcroPrep™ Advance filter plate portfolio includes a variety of membrane types and pore sizes to provide the best possible performance for a wide range of sample preparation and high throughput screening applications. AcroPrep™ Advance filter plates are ideal for concentration, purification and desalting of proteins and peptides; bead and chromatography resin-based applications; gross fractionation and lysate clarification; and general filtration.

AcroPrep™ Advance 96-well filter plates for solvent filtration

Applications include metabolic studies, molecular or drug synthesis reactions, sample preparation using solvents, and aggressive filtration applications.

- Chemically resistant materials provide a stable platform to process samples in organic solvents
- Low non-specific binding - inert materials of construction ensure complete recovery of samples
- Well geometry results in faster, more uniform filtration rates across the plate with reduced hold-up volume
- Output tip geometry allows direct flow of samples into receiver plate reducing cross-contamination risk

Dimensions	
Length:	128 mm
Width:	86 mm
Height (with lid):	18 mm (350 µl only)
Height (without lid):	14 mm (350 µl); 33 mm (1 ml); 47 mm (2 ml)
Well bottom area:	0,25 cm^2
Recommended operating vacuum:	≥254 mm Hg

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Recommended centrifugal force:	1500 ×g
Materials of construction:	Filter media: PTFE (polytetrafluoroethylene) membrane or GHP (hydrophilic polypropylene) membrane Plate housing: PP Lid: PS

Description	Well volume (µl)	Recommended working volume (µl)	Pk	Cat. No.
AcroPrep™ Advance, 350 µl, 0,2 µm PTFE membrane	350	≤300	10	**738-0109**
AcroPrep™ Advance, 350 µl, 0,45 µm PTFE membrane	350	≤300	10	**738-0110**
AcroPrep™ Advance, 350 µl, 0,2 µm GHP membrane	350	≤300	10	**518-0049**
AcroPrep™ Advance, 350 µl, 0,45 µm GHP membrane	350	≤300	10	**518-0050**
AcroPrep™ Advance, 1 ml, 0,2 µm PTFE membrane	1000	≤900	5	**738-0121**
AcroPrep™ Advance, 1 ml, 0,45 µm PTFE membrane	1000	≤900	5	**738-0122**
AcroPrep™ Advance, 1 ml, 0,2 µm GHP membrane	1000	≤900	5	**518-0051**
AcroPrep™ Advance, 1 ml, 0,45 µm GHP membrane	1000	≤900	5	**518-0052**
AcroPrep™ Advance, 2 ml, 0,2 µm PTFE membrane	2000	≤1900	5	**738-0131**
AcroPrep™ Advance, 2 ml, 0,45 µm PTFE membrane	2000	≤1900	5	**738-0132**
AcroPrep™ Advance, 2 ml, 0,2 µm GHP membrane	2000	≤1900	5	**518-0053**
AcroPrep™ Advance, 2 ml, 0,45 µm GHP membrane	2000	≤1900	5	**518-0054**

PALL Life Sciences

Filter plates, 96-well, for aqueous filtration, AcroPrep™ Advance

The AcroPrep™ Advance filter plate portfolio includes a variety of membrane types and pore sizes to provide the best possible performance for a wide range of sample preparation and high throughput screening applications. AcroPrep™ Advance filter plates are ideal for concentration, purification and desalting of proteins and peptides; bead and chromatography resin-based applications; gross fractionation and lysate clarification; and general filtration.

AcroPrep™ Advance 96-well filter plates for aqueous filtration

Applications include general sample preparation, gross fractionation, cell harvesting, and cell-based assays.

- Efficient particulate removal - a range of membranes and pore sizes ensures optimal processing of particulate-laden samples
- Well geometry results in faster, more uniform filtration rates across the plate with reduced hold-up volume
- Output tip geometry provides direct flow of samples into receiver plate without concerns about cross contamination
- Automation compatible - manufactured in accordance with SBS guidelines, allowing plates to be run in manual, semi-automated and automated processes
- Easy identification - allows for labelling on the smooth top surface and textured window, as well as provides easy usage orientation through the A1 corner notch

Dimensions	
Length:	128 mm
Width:	86 mm
Height (with lid):	18 mm (350 µl only)
Height (without lid):	14 mm (350 µl); 33 mm (1 ml); 47 mm (2 ml)
Well bottom area:	0,25 cm^2
Recommended operating vacuum:	≥254 mm Hg
Recommended centrifugal force:	1500 ×g
Typical vacuum filtration performance:	0,2 µm Supor: processing time 9 mins; hold up volume 8 µl 1,0 µm glass fibre: processing time 2 mins; hold up volume 19 µl 30 - 40 µm PP/PE: processing time 1 mins; hold up volume 4 µl
Materials of construction:	Filter media: Supor® (polyethersulfone), glass fibre (borosilicate glass without binder), and PP/PE non-woven media Plate housing: PP Lid: PS

Description	Well volume (µl)	Recommended working volume (µl)	Pk	Cat. No.
AcroPrep™ Advance, 350 µl, 1,0 µm glass fibre	350	≤300	10	**518-0026**
AcroPrep™ Advance, 1 ml, 0,2 µm Supor® membrane	1000	≤900	5	**738-0116**
AcroPrep™ Advance, 1 ml, 1,0 µm glass fibre	1000	≤300	5	**738-0119**
AcroPrep™ Advance, 2 ml, 1,0 µm glass fibre	2000	≤1900	5	**738-0130**

PALL Life Sciences

Filter plates, 96-well, for DNA purification, AcroPrep™ Advance

The AcroPrep™ Advance filter plate portfolio includes a variety of membrane types and pore sizes to provide the best possible performance for a wide range of sample preparation and high throughput screening applications. AcroPrep™ Advance filter plates are ideal for concentration, purification and desalting of proteins and peptides; bead and chromatography resin-based applications; gross fractionation and lysate clarification; and general filtration.

AcroPrep™ Advance 96-well filter plates for DNA purification

Applications include plasmid DNA purification and genomic DNA purification.

- High binding capacity - optimised for maximum binding and yield of DNA from a variety of sample types
- Well geometry results in reduced hold-up volume and high recovery of DNA
- Outlet tip geometry provides direct flow of samples into receiver plate without concerns about cross contamination
- Optimised membrane ensures high yields of contaminant-free DNA for downstream applications
- Automation compatible - manufactured in accordance with SBS guidelines, which allows entire DNA purification process to be performed on automated equipment

Dimensions	
Length:	128 mm
Width:	86 mm
Height (with lid):	18 mm (350 µl only)
Height (without lid):	14 mm (350 µl); 33 mm (1 ml)
Well bottom area:	0,25 cm^2
Recommended operating vacuum:	≥254 mm Hg
Recommended centrifugal force:	1500 ×g
Typical processing time:	Vacuum: 2 seconds Centrifuge: <2 minutes
Typical hold-up volume:	Optimised for maximum binding Vacuum: 19 µl
Materials of construction:	Filter media: DNA binding (borosilicate glass without binder) Plate housing: PP Lid: PS

Description	Well volume (µl)	Recommended working volume (µl)	Pk	Cat. No.
AcroPrep™ Advance, 350 µl, DNA binding	350	≤300	10	**738-0108**
AcroPrep™ Advance, 1 ml, DNA binding	1000	≤900	5	**738-0120**

PALL Life Sciences

IVD

Filter plates, 96-well, for neonatal screening, AcroPrep™ Advance

The AcroPrep™ Advance filter plate portfolio includes a variety of membrane types and pore sizes to provide the best possible performance for a wide range of sample preparation and high throughput screening applications. AcroPrep™ Advance filter plates are ideal for concentration, purification and desalting of proteins and peptides; bead and chromatography resin-based applications; gross fractionation and lysate clarification; and general filtration.

AcroPrep™ Advance 96-well filter plates for neonatal screening

Applications include screening of functional and genetic disorders on newborn babies, and sample preparation for assays such as BIOT, GALT and TGAL.

- High performance membrane - effectively holds back fibres from dried blood spots which can interfere with optical density readings
- Outlet tip geometry minimises sample leakage and loss during incubation steps, decreasing the time required for sample retesting and second screens
- Optimised well design provides consistency in filtration times, ensuring lot to lot reproducibility
- Sample cross contamination minimised - outlet tip design reduces the presence of hanging drops following filtration
- Low non-specific binding - prevents target analytes from binding and interfering with assay performance

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Dimensions	
Length:	128 mm
Width:	86 mm
Height (with lid):	18 mm
Height (without lid):	14 mm
Well bottom area:	0,25 cm^2
Recommended operating vacuum:	≥254 mm Hg
Recommended centrifugal force:	1500 ×g
Typical processing time:	Vacuum: 2 seconds Centrifuge: <2 minutes
Typical hold-up volume:	Filter plate was filled with 300 µl of water and filtered at 254 mm Hg Vacuum: 5 µl (738-0112) Vacuum: 17 µl (738-0115)
Materials of construction:	Filter media: Glass fibre/Supor® (polyethersulfone) membrane and Supor® membrane Plate housing: PP Lid: PS

Description	Well volume (µl)	Recommended working volume (µl)	Pk	Cat. No.
AcroPrep™ Advance, 350 µl, glass fibre/1,2 µm Supor® membrane, for biotinase assays	350	≤300	10	**738-0112**
AcroPrep™ Advance, 350 µl, 1,2 µm Supor® membrane	350	≤300	10	**738-0115**

PALL Life Sciences

Filter plates, 384-well, 100 µl, AcroPrep™

Ideal for high throughput sample preparation and detection procedures. AcroPrep™ filter plates are constructed from chemically-resistant, biologically-inert PP with a clear PS lid and are available in a variety of membrane configurations to meet the requirements of numerous applications.

- Available with a choice of membrane configurations, plate colours, well volumes, and outlet tip lengths
- Robotic friendly design has single-piece construction, designed in accordance with SBS standards
- Plates are stackable with and without lids
- Crosstalk between wells eliminated as membranes are individually sealed in each well, and each well has a fluid detector
- A serialised barcode label allows for the use of automated tracking systems and identifies the membrane type

Model	AcroPrep™ 384, 100 µl (long tips)	AcroPrep™ 384, 100 µl (short tips)
Max. working volume/well (µl)	80	
Well bottom area (cm^2)	0,05	
L×W×H with lid (mm)	128×86×21	128×86×17
L×W×H without lid (mm)	128×86×19	128×86×14

Description	Application	Pk	Cat. No.
AcroPrep™ 384 filter plates, 100 µl (long tips)			
10K Omega™ membrane, long tips, natural	Concentrate, desalt, and purify DNA, RNA and oligonucleotides; nucleic acid purification	10	**516-0172**
30K Omega™ membrane, long tips, natural	Concentrate, desalt, and purify DNA, RNA and oligonucleotides; nucleic acid purification	10	**516-0174**
100K Omega™ membrane, long tips, natural	Concentrate, desalt, and purify DNA, RNA and oligonucleotides; nucleic acid purification	10	**736-4004**
0.45 µm GHP membrane, long tips, natural	Concentrate, desalt, and purify DNA, RNA and oligonucleotides; nucleic acid purification	10	**736-4000**
1,0 µm glass fibre, long tips, natural	Radiolabelled cell assays; enzyme assays	10	**516-0170**
1,2 µm Supor® membrane, long tips, natural	General filtration; bead/resin-based applications	10	**516-0176**
AcroPrep™ 384 filter plates, 100 µl (short tips)			
10K Omega™ membrane, short tips, natural	Concentrate, desalt, and purify DNA, RNA and oligonucleotides; nucleic acid purification	10	**516-0173**
30K Omega™ membrane, short tips, natural	Concentrate, desalt, and purify DNA, RNA and oligonucleotides; nucleic acid purification	10	**516-0175**
100K Omega™ membrane, short tips, natural	Concentrate, desalt, and purify DNA, RNA and oligonucleotides; nucleic acid purification	10	**736-4005**
0,2 µm BioTrace™ nitrocellulose membrane, short tips, white	Solid phase ELISA; drug discovery using bound molecules	10	**736-0613**
0,45 µm GHP membrane, short tips, natural	Bead-/sorbent-based purification; plasmid lysate clearing; isolate DNA from agarose gel slices	10	**736-4001**
1,2 µm Supor® membrane, short tips, natural	General filtration; bead/resin-based applications	10	**736-4006**

Description	Pk	Cat. No.
Accessories		
Multi-well filter plate vacuum manifold	1	**514-0589**
Receiver plate spacer block, 1 ml	1	**516-0246**
Receiver plate spacer block, 350 µl	1	**516-0247**

PALL Life Sciences

Vacuum manifold and accessories

The multi-well plate vacuum manifold is an anodised aluminium manifold that has been designed and optimised for the vacuum filtration of AcroPrep™, AcroPrep Advance, and AcroWell™ multi-well filter plates.

- Supplied complete with the necessary O-ring and gasket; control block includes vacuum pressure gauge, vacuum metering valve, vacuum release valve, and ¼" hose barb for vacuum line attachment
- Vacuum manifold unit includes a Delrin® plastic spacer block designed to accommodate standard 350 µl receiver plates and optimised to reduce space between the receiver plate and the filter plate during vacuum filtration
- Optional spacer block available for use with receiver plates
- Adapter collar holds filter plates tightly to receiver plates for centrifugation

Description	Pk	Cat. No.
Multi-well filter plate vacuum manifold	1	**514-0589**
Receiver plate spacer block, 1 ml	1	**516-0246**
Receiver plate spacer block, 350 µl	1	**516-0247**

Description	Pk	Cat. No.
Cap sealing mat for AcroPrep™ filter plates		
Cap mat for incubation	5	**738-1005**

Filter plates, protein precipitation, UNIFILTER®

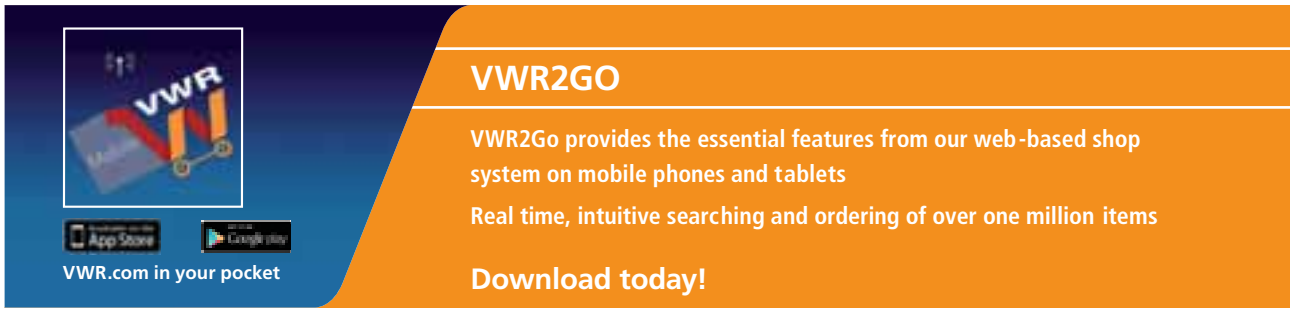
Whatman (GE Healthcare)

Rigid, glass-filled PP

The protein precipitation UNIFILTER® filter plate is optimised for removing acetonitrile-precipitated proteins from plasma or serum samples. The plates contain specially formulated dual membranes with two distinct layers. The top layer acts as a prefilter to remove coarse particulates. The bottom layer is oleophobic for retaining the well contents without dripping. This provides a final filter for removing fine particulate matter when vacuum or centrifugation is applied.

- Replaces requirement for acetonitrile/centrifugation steps in protein precipitation with a simpler operation
- More than 98% of protein removed
- Glass-filled PP construction enables chemical and heat resistant operation
- Long drip directors reduce the possibility of crosstalk into collectors

Description	Well volume (ml)	Pk	Cat. No.
96-well filter plate, 2 ml, fast flow medium	2	5	**734-1146**



Filtration microplates, UNIFILTER®
Whatman (GE Healthcare)

UNIFILTER® microplates with filter bottom wells are convenient and ready to use. Available in 24-, 96- and 384-well formats, in a range of well volumes from 100 µl to 10 ml, these microplates offer a choice of filter media to meet exact application requirements.

- Drip director design ensures precise collection of the filtrate to allow for further processing and analysis
- Integral filter design prevents well to well contamination
- Wide range of well volume options ensures efficient use of materials
- Choice of filter media allows control of the flow rates and retention characteristics
- Versatile due to broad range of filtration media available

Filtration microplates, UNIFILTER® 24-well 10 ml

Widely used for applications that require very large sample or reagent volumes. Typically these applications include biomolecule purification by solid phase extraction and organic synthesis in combinatorial chemistry library generation. The PP construction enables chemical and heat resistant operation. The long drip directors facilitate collection of filtrate with no crosstalk.

Filtration microplates, UNIFILTER® 384-well 100 µl

100 µl well volume allows a large enough sample for recovery after filtration. The 384-well filter plate has been successfully used for DNA template clean up, cell capture and for the removal of unwanted debris. Made of clear PS.

Filtration microplates, UNIFILTER® 96-well 2 ml

Widely used for applications that require larger sample or reagent volumes. Typically these applications include biomolecule purification by solid phase extraction and organic synthesis in combinatorial chemistry library generation. The glass filled PP construction enables chemical and heat resistant operation. Both PKP and GF/D filter media are chemically resistant, with the PKP used for retaining solvent, while the GF/D is used for fast flow rates.

Filtration microplates, UNIFILTER® 96-well 800 µl

The 800 µl long drip UNIFILTER® is typically used in purifications, isolations and separation of biomolecules, particularly DNA. The well volume 800 µl is ideal for standard DNA plasmid miniprep. Constructed from clear PS.

Material	Drip director	Pk	Cat. No.
Filtration microplates, UNIFILTER® 24-well 10 ml, natural PP			
Whatman GF/C	long	25	**734-2549**
25 - 30 µm melt blown PP	long	25	**734-2550**
10 - 12 µm melt blown PP	long	25	**734-2551**
Filtration microplates, UNIFILTER® 384-well 100 µl, clear PS			
Whatman GF/C	long	50	**512-1141**
DNA binding	long	50	**734-1235**
Filtration microplates, UNIFILTER® 96-well 2 ml, glass-filled PP			
Whatman GF/C	long	25	**734-2542**
0,45 µm hydrophilic PVDF	long	25	**736-0351**
Whatman GF/D	long	25	**734-2546**
Filtration microplates, UNIFILTER® 96-well 800 µl, clear PS			
Whatman GF/C	long	25	**734-2522**
Whatman GF/B	long	25	**734-2523**
0,45 µm PP membrane	long	25	**734-1357**
0,45 µm cellulose acetate	long	25	**734-2524**
DNA binding	long	25	**734-2525**
Lysate clarification media and 0,45 µm PP	long	25	**738-1006**

Collection and analysis plates, UNIPLATE™
Whatman (GE Healthcare)

The UNIPLATE™ series includes microplates with a range of well profiles, well volumes and well densities, made from diverse polymer materials. Most UNIPLATE™ microplates conform to the proposed SBS microplate standard and fit most microplate readers and automated plate handling devices. They are suitable for a wide range of applications, including simple filtrate collection, when used in conjunction with UNIFILTER® microplates, as well as homogeneous assay techniques utilised in HTS.

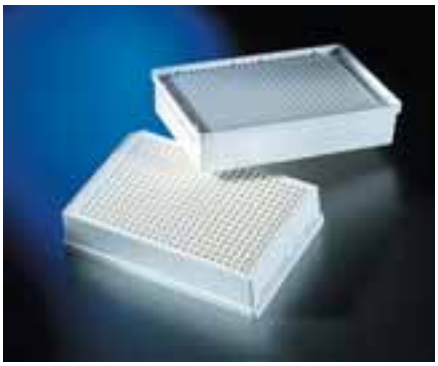
Description	Colour	Well volume (ml)	Pk	Cat. No.
UNIPLATE™ flat bottom microplates				
PP, 48-well (rectangular)	Natural	5	25	**734-2561**
UNIPLATE™ round bottom microplates				
PP, 24-well	Natural	10	25	**734-2558**
PP, 96-well	Natural	2	25	**734-2559**

Vacuum assist frame, VacAssist™
Whatman (GE Healthcare)

This thin, transparent PTFE film, stretched inside a light metal frame, fits on top of the microplate during the vacuuming process. If one well empties before the others, this device automatically seals the mouth of the empty well, allowing the other wells to evacuate.

Description	Pk	Cat. No.
Vacuum assist frame	1	**512-1095**

Filter plates, 96- and 384-well, FiltrEX™
Corning®



FiltrEX™ filter plates meet the industry standards for plate dimensions. The rigid side walls make the plate ideal for automation and the wide skirt accepts barcodes. Individual filter discs are encapsulated in the plate by a process that ensures 100% integrity of each well. The design of the nozzle prevents sample wicking and cross-contamination. Glass fibre filter plates can be used for a variety of applications, such as plasmid isolation, DNA purification, PCR clean-up or receptor/ligand binding assays. The low-binding hydrophilic PVDF membrane can be used for lysate clarification, protein kinase assays, or bead- or resin-based separation assays.

Description	Colour	Recommended working volume (µl)	No. of wells	Sterile	Pk	Cat. No.
96-well FiltrEX™ filter plates						
0,2 µm PVDF membrane, hydrophilic	White	350	96	-	50	**732-5509**
0,2 µm PVDF membrane, hydrophilic	White	350	96	+	50	**732-5510**
0,2 µm PVDF membrane, hydrophilic	Clear	350	96	-	50	**732-5511**
0,25 mm Glass fibre filter	White	350	96	-	50	**732-5512**
0,66 mm Glass fibre filter	White	350	96	-	50	**732-5513**

Description	Pk	Cat. No.
Accessories		
Volume adapter applicator, for assembling the filter plate to the adapter	1	**734-1787**
Filter guard for FiltrEX™ filter plates	100	**732-0489**

VWR COLLECTION

Delivering high quality and superior performance

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Deep well plates, 1,2 ml, 2,2 ml and 22 ml

12-well reservoir

96 deep well plate

PP

These deep well plates are designed for robotic use. They have smooth inside surfaces to ensure that whole sample can be pipetted.

- Printed alphanumeric labelling of wells
- Autoclavable
- Can be sealed using film or mats
- Freezable to –90 °C

Description	Pk	Cat. No.
96-well plates, PP, 1,2 ml	10	**391-0077**
96-well plate, PP, 2,2 ml	10	**732-0585**
12-well reservoir, PP, 22 ml	20	**732-0586**

Deep well plates, 96 square well, 2.5 ml

PP

These plates hold a full 2,5 ml (2,2 ml with sealing mat in place) and work as storage plates or reservoirs.

- Black snap-in corner marker ensures proper orientation
- Openings in the plate sides permit easy removal of mats or film
- Clear, lift-off lid, which fits even with mat in place, is available for transport or freezer storage
- Autoclavable and freezable to –90 °C

Description	Pk	Cat. No.
Deep 96-well plate, 2,5 ml	10	**732-0612**
Deep 96-well plate, 2,5 ml with lid	10	**732-0613**

Deep well microplates, 96-square well
Biotix

Medical grade virgin PP, non treated

These sturdy 96-deep well microplates conform to SBS standards for automated high throughput processing and compound storage.

- Alphanumeric grid to help with sample identification; notched bottom right corner to ensure correct plate orientation
- Conical shaped wells facilitate sample recovery
- Each plate can withstand centrifugation up to 6000 RCF when supported by the appropriate microplate rotor
- Excellent chemical resistance and temperature resistant from +121 to –80 °C
- Stackable to save space in incubators and freezers
- Tested free from DNase, RNase and endotoxin

Conform to ANSI/SBS 1-2004 standards for automated workstations. All plates are BioReady™ certified for purity.

Description	Colour	Sterile	Well volume (ml)	Pk	Cat. No.
Deep well microplate, 96-square well with V-bottom	Clear	-	1,2	10	**732-2491**
Deep well microplate, 96-square well with V-bottom	Clear	+	1,2	10	**732-2492**
Deep well microplate, 96-square well with V-bottom	Clear	-	2,2	5	**732-2482**
Deep well microplate, 96-square well with V-bottom	Clear	+	2,2	10	**732-2483**

Deep well microplates, 96-round well
Biotix

Medical grade, virgin PP, untreated

With a smooth, round-well geometry, these deep well microplates maximise sample volume while eliminating the "wicking" effect common with square-well microplates. Standard plate format features raised well identifiers between each well for clear identification. Individual well format features a void between each well, reducing risk of cross-contamination.

- Excellent chemical and temperature resistance
- Available with a choice of standard format or individual well format
- Tested free from DNase, RNase and endotoxin

Conform to ANSI/SBS 1-2004 standards for automated workstations. All plates are BioReady™ certified for purity.

Description	Colour	Sterile	Well volume (ml)	Pk	Cat. No.
Deep well microplate, 96-round well with U-bottom	Clear	-	1,2	5	**732-2478**
Deep well microplate, 96-round well with U-bottom	Clear	+	1,2	5	**732-2479**
Deep well microplate, 96-round well with U-bottom, individual well format	Clear	-	1,2	5	**732-2480**
Deep well microplate, 96-round well with U-bottom, individual well format	Clear	+	1,2	5	**732-2481**

Deep well microplates, 384-square well
Biotix

Medical grade virgin PP, non treated

These sturdy 384-deep well microplates conform to SBS standards for automated high throughput processing and compound storage.

- Alphanumeric grid to help with sample identification; notched bottom right corner to ensure correct plate orientation
- Conical shaped wells facilitate sample recovery
- Each plate can withstand centrifugation up to 6000 RCF when supported by the appropriate microplate rotor
- Excellent chemical resistance and temperature resistant from +121 to –80 °C
- Stackable to save space in incubators and freezers
- Tested free from DNase, RNase and endotoxin

Conform to ANSI/SBS 1-2004 standards for automated workstations. All plates are BioReady™ certified for purity.

Description	Colour	Sterile	Well volume (µl)	Pk	Cat. No.
Deep well microplate, 384-square well	Clear	-	120	10	**732-2474**
Deep well microplate, 384-square well	Clear	+	120	10	**732-2475**
Deep well microplate, 384-square well	Clear	-	190	10	**732-2476**
Deep well microplate, 384-square well	Clear	+	190	10	**732-2477**

Storage microplates, 96-well
Corning®

PVC, clear, non sterile, without lid

Untreated microplates for solution-based assays, serial dilutions, and general storage applications.

Well volume: 250 µl (260 µl for V-bottom)

Recommended working volume: 50 to 150 µl

Description	Colour	Recommended working volume (µl)	Pk	Cat. No.
Flat bottom PVC microplates, untreated	Clear	50 - 150	100	**734-1516**
Round bottom PVC microplates, untreated	Clear	50 - 150	100	**734-1517**
V-bottom PVC microplates, untreated	Clear	50 - 150	100	**734-1518**

Storage plates and blocks, 96-well
Corning®

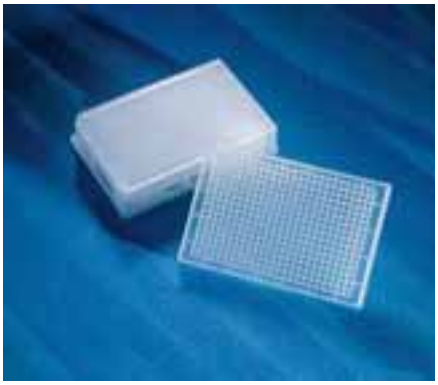
PP, non treated, without lid

Standard and large volume 96-well microplates and storage blocks to meet assay and storage requirements.

- Choice of flat, round or V-shaped well bottom
- Uniform skirt heights for greater robotic gripping surface
- Resistant to many common organic solvents (e.g. DMSO, ethanol, methanol)
- Certified free from DNase and RNase

Description	W×D×H (mm)	Sterile	Packed	Well volume (µl)	Pk	Cat. No.
Storage plate, 96-well, natural, flat well	127,76×85,48×14,22	-	25/bag	360	100	**734-1551**
Storage plate, 96-well, natural, V-shaped well	127,76×85,48×14,22	+	25/bag	320	100	**734-1545**
Storage plate, 96-well, natural, V-shaped well	127,76×85,48×14,22	-	25/bag	320	100	**734-1550**
Storage plate, 96-well, expanded volume, natural, V-bottom well	127,76×85,48×14,35	+	10/bag	450	50	**732-0485**
Storage plate, 96-well, expanded volume, natural, V-bottom well	127,76×85,48×14,35	-	10/bag	450	50	**732-0484**
Storage plate, 96-well, black, round well	127,76×85,48×14,22	-	25/bag	360	100	**734-1782**
Storage plate, 96-well, white, round well	127,76×85,48×14,22	-	25/bag	360	100	**734-1781**
Storage plate, 96-well, natural, round well	127,76×85,48×14,22	+	25/bag	360	100	**734-1547**
Storage plate, 96-well, natural, round well	127,76×85,48×14,22	-	25/bag	360	100	**734-1552**
Storage block, 96-well, natural, round well	127,76×85,48×27,18	+	10/bag	500	50	**734-1675**
Storage block, 96-well, natural, round well	127,76×85,48×27,18	-	10/bag	500	100	**734-1676**
Storage block, 96-well, natural, round well	127,76×85,09×41,66	+	5/bag	1000	25	**734-1677**
Storage block, 96-well, natural, round well	127,76×85,09×41,66	-	5/bag	1000	100	**734-1678**
Storage block, 96-well, natural, square well	128,27×85,85×43,94	+	5/bag	2000	25	**734-1679**
Storage block, 96-well, natural, square well	128,27×85,85×43,94	-	5/bag	2000	100	**734-1680**

Storage plates and blocks, 384-well
Corning®



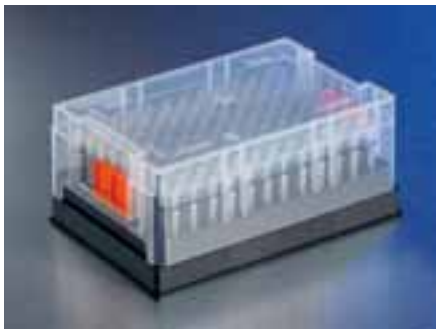
PP

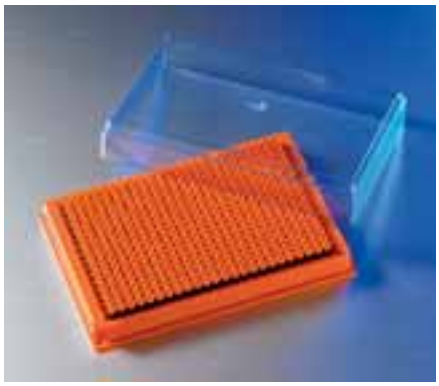
Standard and large volume 384-well microplates and storage blocks to meet assay and storage requirements.

- Resistant to many common organic solvents (e.g. DMSO, ethanol, methanol)
- Black microplate ideal for fluorescent assays requiring solvent resistance
- Certified free from DNase and RNase

Description	Colour	W×D×H (mm)	Sterile	Well volume (µl)	Pk	Cat. No.
384-well storage block, clear, V well bottom	Clear	127,76×85,48×24,73	+	240	50	**732-0483**
384-well storage block, clear, V well bottom	Clear	127,76×85,48×24,73	-	240	50	**736-0202**
Standard 384-well storage plate, clear, round well bottom	Clear	127,76×85,48×14,22	+	95	100	**732-5528**
Standard 384-well storage plate, clear, round well bottom	Clear	127,76×85,48×14,22	-	95	100	**732-5529**
Standard 384-well storage plate, black, round well bottom	Black	127,76×85,48×14,22	-	95	100	**732-5530**
384-well storage block, clear, round well bottom	Clear	127,76×85,48×27,81	+	180	25	**732-5550**
384-well storage block, clear, round well bottom	Clear	127,76×85,48×27,81	-	180	100	**732-5551**

Storage tubes, barcoded
Corning®





PP

The 1D/2D storage line is an innovative product with both a linear 1D and 2D barcodes etched on each tube.

- Maximum information, 14×14 dot 2D barcode
- Barcode stability, laser-etched, not an attached label
- Compound compatibility, polypropylene construction throughout, making it inert

Description	Capacity (ml)	Colour	Packed	Recommended working volume (ml)	Pk	Cat. No.
Tube volume: 1.3 ml						
96× 1D/2D barcoded storage tubes, without screw caps	1,3	Natural	bulk packed	up to 1,1	960	**479-0968**
96× 1D/2D barcoded storage tubes, without screw caps	1,3	Natural	racked with cover	up to 1,1	960	**479-0969**
96× 1D/2D barcoded storage tubes, with screw caps	1,3	Orange	bulk packed	up to 1,1	960	**479-0970**
96× 1D/2D barcoded storage tubes, with screw caps	1,3	Orange	racked with cover	up to 1,1	960	**479-0971**
Tube volume: 110/120 µl						
384× 2D barcoded storage tubes, round, without plug caps	110	Black	racked	up to 90	7.680	**479-0972**
384× 2D barcoded storage tubes, square, without plug caps	120	Black	racked	up to 100	7.680	**479-0973**

Microtubes 1,2 ml in cluster racks
Thermo Scientific

PP

Ideal for storage and screening applications. 96 individual 1,2 ml tubes are held in a robust SBS footprint base.

- Rack has an open base to allow full robotic access to micro-tubes
- Each tube is fully supported to withstand the pressure applied by robotic systems
- Alphanumeric grid-referencing moulded into the rack and lid
- Bevelled corner for one-way fit
- Temperature range -170 to +120 °C

Description	Pk	Cat. No.
Microtubes 1,2 ml, in a cluster rack with lid, each rack containing 96 microtubes	960	**732-4827**
Microtubes tubes 1,2 ml (loose)	1.000	**732-4845**

Microtubes 1,2 ml, in grid referenced cluster racks
Thermo Scientific

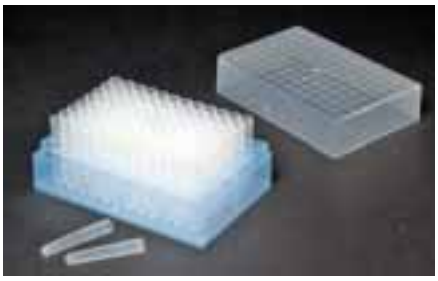
PP

Ideal for storage and screening applications. The bottom of each cluster tube is engraved with an alphanumeric grid-reference corresponding to its grid position.

- Rack has an open base to allow full robotic access to microtubes
- Lockable lid ensures that the tubes remain secure during transport
- Each tube is fully supported to withstand the pressure applied by robotic systems
- Alphanumeric grid-referencing moulded into the rack and lid
- Temperature range –170 to +120 °C

Description	Capacity (ml)	Pk	Cat. No.
Microtubes 1,2 ml with MULTISIP™ septum plugs, in grid-referenced microtube cluster rack with lockable lid	1,2	960	**732-4919**

Mini tube system, Axygen®
Corning®



PP, 100% virgin

The Axygen 96-well mini tube system is designed to work with 8-strip or 12-strip plug caps.

- Compatible with Beckman, Tecan, Zymark and other robotic workstations
- One-way lid design with etched in alphnumeric grid ensures positive sample identification
- Moulded in condensation rings on cover minimise risk of cross-contamination

Description	Capacity (ml)	Pk	Cat. No.
Mini tubes			
Individual pre-sterilised mini tubes, PP, racked	0,6	4.800	**731-0212**
Individual mini tubes, PP, racked	0,6	4.800	**731-0211**
Individual mini tubes, PP, bulk	0,6	4.800	**731-0210**
12-strip pre-sterilised mini tubes, PP, racked	1,1	400	**731-0215**
12-strip mini tubes, PP, racked	1,1	400	**731-0214**
12-strip mini tubes, PP, bulk	1,1	400	**731-0213**
8-strip pre-sterilised mini tubes, PP, racked	1,1	600	**732-1138**
8-strip mini tubes, PP, racked	1,1	600	**731-0217**
8-strip mini tubes, PP, bulk	1,1	600	**731-0216**
Individual pre-sterilised min tubes, PP, racked	1,1	4.800	**731-0220**
Individual mini tubes, PP, racked	1,1	4.800	**731-0219**
Individual mini tubes, PP, bulk	1,1	960	**733-1979**
Caps			
12-strip pre-sterilised cap for mini tubes	0,6+1,1	400	**731-0222**
12-strip cap for mini tubes	0,6+1,1	400	**731-0221**
8-strip pre-sterilised caps for mini tubes	0,6+1,1	600	**731-0224**
8-strip cap for mini tubes	0,6+1,1	600	**731-0223**

Microplates, 96- and 384-well, Nunc™
Thermo Scientific

PP, untreated, without lid

These plates are ideal for liquid phase assays, sample preparation, compound storage and chemical synthesis as they are non-toxic and resistant to most chemicals, solvents and alcohols. White plates for luminescence applications maximise reflection of signal and minimise autoluminescence. Black plates for fluorescence applications reduce background fluorescence and minimise back-scattered light. Coloured plates are particularly suitable for storage applications.

- Compatible with robotics and automated systems
- Choice of conical (V) or round (U) bottom well shape for optimal sample recovery
- Rounded square wells minimise wicking
- Shared wall technology of 96-MicroWell™ plate for space saving and improved mixing in wells (except Cat. No. 735-0016)

Description	Colour	Recommended working volume (µl)	Sterile	Pk	Cat. No.
96-MicroWell™ plates					
Pinchbar design, V96, natural	Natural	200	-	60	**735-0016**
High flange design, V96, natural*	Natural	400	-	120	**732-2620**
High flange design, V96, natural, sterile*	Natural	400	+	120	**732-2622**
High flange design, V96, black*	Black	400	-	120	**732-2621**
High flange design, V96, white*	White	400	-	120	**732-2624**
High flange design, V96, blue*	Blue	400	-	120	**732-2625**
High flange design, V96, red*	Red	400	-	120	**732-2619**
High flange design, V96, yellow*	Yellow	400	-	120	**732-2623**
High flange design, U96, natural	Natural	450	-	120	**732-2661**
High flange design, U96, natural, sterile	Natural	450	+	120	**732-2662**
High flange design, U96, black	Black	450	-	120	**732-2663**
High flange design, U96, white	White	450	-	120	**732-2664**

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Description	Colour	Recommended working volume (µl)	Sterile	Pk	Cat. No.
96-MicroWell™ plates					
High flange design, U96, blue	Blue	450	-	120	**732-2666**
High flange design, U96, red	Red	450	-	120	**732-2665**
High flange design, U96, yellow	Yellow	450	-	120	**732-2667**
384-well plates					
Pinchbar design, U384, natural*	Natural	10 - 100	-	120	**732-2654**
Pinchbar design, U384, natural, sterile*	Natural	10 - 100	+	120	**732-2655**
Pinchbar design, U384, black*	Black	10 - 100	-	120	**732-2657**
Pinchbar design, U384, white*	White	10 - 100	-	120	**732-2656**
Pinchbar design, U384, blue*	Blue	10 - 100	-	120	**732-2660**

* Certified free of RNase and DNase

Deep well plates and cover mats
Brand

PP or PS, non sterile

Designed for a wide range of applications, such as high throughput screening, cell and tissue cultures, serial dilutions, reagent transfer, and sample storage down to –80 °C (PP) or –20 °C (PS). Deep well plates are manufactured in standard ANSI/SLAS format and are stackable for easy storage.

- PP for high chemical resistance, for example, against DMSO, phenol, chloroform
- Autoclavable at 121 °C (2 bar) acc. DIN EN 285 (PP plates)
- Round shape wells allow optimal sample mixing and recovery
- Alphanumeric coding and cut-away corner simplify sample identification and orientation
- Can be used with multi channel pipettes and automatic liquid handling systems from all leading manufacturers

Description	Pk	Cat. No.
96-well plate, PP, round well shape, 0,5 ml	48	**391-0158**
96-well plate, PP, round well shape, 1,1 ml	24	**391-5704**
96-well plate, PS, round well shape, 1,1 ml	32	**391-0159**
96-well plate, PP, round well shape, 1,2 ml, low profile	50	**738-1001**
96-well plate, PP, square well shape, 2,2 ml	24	**391-5705**
384-well plate, PP, V-well shape, 0,3 ml	48	**391-5712**

Description	Pk	Cat. No.
Cover mats for deep well plates		
Cover mat for 0,5 ml 96-well plates, PP	50	**391-5713**
Cover mat for 1,1 ml 96-well plates, modified PE	24	**391-5706**
Cover mat for 1,2 ml 96-well plates, low profile, TPE	50	**738-1002**
Cover mat for 2,2 ml 96-well plates, EVA	24	**391-5707**
Cover mat for 0,3 ml 384-well plates, silicone	50	**391-0093**

U96 DeepWell™ plates 1,3 and 2,0 ml, Nunc™
Thermo Scientific

PP

Low design with shared well technology for increased well volume. Ideal for sample collection, storage and combinatorial chemistry library applications.

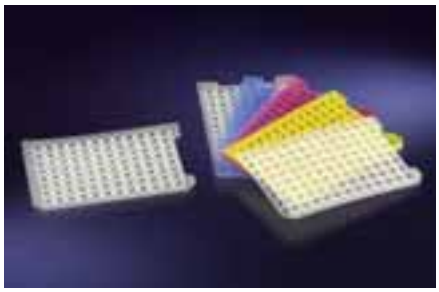
- Round well shape reduces liquid retention
- Resistant to most chemicals, solvents and alcohols used in combinatorial chemistry
- Well design for optimal storage capacity and increased mixing
- Alphanumeric grid for quick sample identification
- Sterile format certified free from RNase and DNase

Colour: Clear

Description	Colour	Recommended working volume (µl)	Pk	Cat. No.
U96 DeepWell™ plate, 1,3 ml, sterile	Clear	50 - 1000	50	**736-0600**
U96 DeepWell™ plate, 1,3 ml, non sterile	Clear	50 - 1000	50	**736-0601**
U96 DeepWell™ plate, 2,0 ml, sterile	Clear	50 - 1900	60	**736-0606**
U96 DeepWell™ plate, 2,0 ml, non sterile	Clear	50 - 1900	60	**736-0607**

Description	Pk	Cat. No.
Well caps for U96 DeepWell™ plates		
Well caps, TPE, sterile	50	**732-2668**
Well caps, TPE	50	**732-2669**
Well caps, TPE	50	**732-2672**
Well caps, pre-slit, silicone	50	**732-2673**

Well caps for U96 DeepWell™ plates
Thermo Scientific



Made from thermoplastic elastomer (TPE), except pre-slit silicone well cap

For sealing 96-well plates, particularly 1,3 ml and 2,0 ml U96 DeepWell™ plates. TPE well caps are resistant to DMSO, ethanol and methanol. Silicone well cap is solvent resistant, but is not suitable for 100% DMSO.

- Suitable for plates being used for chemical and compound storage
- Produces an efficient seal with minimum protrusion into each well
- Pierceable and self-closing
- Can be used at temperatures down to –80 °C (except silicone cap, –20 °C)

Description	Colour	Pk	Cat. No.
Well caps, TPE, sterile	Natural	50	**732-2668**
Well caps, TPE	Natural	50	**732-2669**
Well caps, TPE	Blue	50	**732-2672**
Well caps, pre-slit, silicone	Natural	50	**732-2673**

Library storage plates, 96-well, Falcon®
Corning®

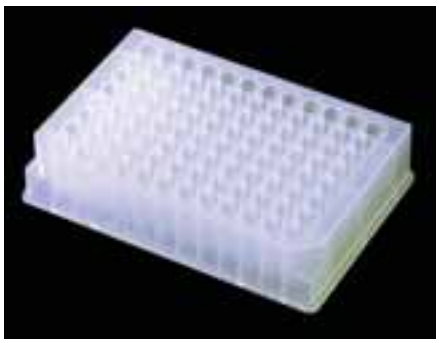
PP plate, PP lid, non sterile

Plates designed for compound storage.

- Rigid and flat plate for consistent automated handling
- Low retention PP and well design give low residual volumes after pipetting
- Lid compatible with automated lidding and de-lidding devices
- Raised well edges and flatness for heat and adhesive sealing

Description	Pk	Cat. No.
Library storage plate, 340 µl, round bottom	100	**734-0384**

Deep well plates, 96- and 48- well, Axygen®
Corning®



PP

Used for sample collection, cell culture and long term storage.

- Excellent chemical resistance and temperature resistance down to –80 °C
- Can withstand centrifugation up to 4000 ×g

Two types of sealing mats are suitable for use with these plates:

AxyMat™ sealing mats are designed for high throughput screening and storage applications. Made of silicone, they can be autoclaved, and following a bleach wash and ethanol rinse protocol, they can also be re-used. AxyMat™ sealing mats are pierceable and self-sealing, ideal for automated processes, and can be used in sub-zero environments.

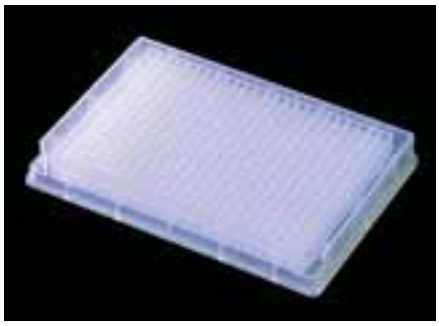
ImpermaMat™ sealing mats are chemically resistant. They are made for use in assays involving strong solvents such as DMSO and similarly harsh solvents. Re-usable. They feature a tight seal to the plate so there is no sample evaporation or well-to-well evaporation. Usable within a wide temperature range: from –80 up to +121 °C.

Description	Colour	Pk	Cat. No.
Deep 96-well plate, conical wells, 0,6 ml	Natural	5	**736-0335**
Deep 96-well plate, conical wells, 0,6 ml, sterile	Natural	5	**736-0336**
Deep 96-well plate, round wells, 1,64 ml	Natural	50	**736-0359**
Deep 96-well plate, round wells, 1,64 ml, sterile	Natural	50	**737-0159**
Deep 96-well plate, round wells, 1,1 ml	Natural	50	**736-0358**
Deep 96-well plate, round wells, 1,1 ml, sterile	Natural	5	**736-0339**
Deep 96-well plate, square wells, 2,2 ml	Natural	25	**736-0344**
Deep 96-well plate, square wells, 2,2 ml, sterile	Natural	25	**736-0345**
Deep 48-well plate, rectangular wells, 4,6 ml	Natural	25	**736-0348**
Deep 48-well plate, rectangular wells, 4,6 ml, sterile	Natural	25	**736-0349**

Description	Pk	Cat. No.
Accessories		
AxyMat™ sealing mat for 96-well plate with round wells	10	**736-0340**
AxyMat™ sealing mat for 0,6 ml 96-well deep well plate	10	**736-0337**
AxyMat™ sealing mat for 2,0 ml 96-well deep well plate with square wells	10	**736-0346**
ImpermaMat™ sealing mat for 96-deep well plate with round wells	10	**736-0341**
ImpermaMat™ sealing mat for 96-well plate with square wells	10	**736-0347**
ImpermaMat™ sealing mat for 48-well plate with rectangular wells	10	**736-0350**

Deep well plates, 384-well, 120 and 240 µl, Axygen®

Corning®



PP

Used for sample collection, cell culture and long-term storage.

- Square wells
- Excellent chemical resistance
- Temperature resistant down to –80 °C
- Can withstand centrifugation up to 4000 ×g

Two types of sealing mats are suitable for deep 384-well microplates:

AxyMat™ sealing mats are designed for high throughput screening and storage applications. Made of silicone, they can be autoclaved, and following a bleach wash and ethanol rinse protocol, they can also be re-used. AxyMat™ sealing mats are pierceable and self-sealing, ideal for automated processes, and can be used in sub-zero environments.

ImpermaMat™ sealing mats are chemically resistant. They are made for use in assays involving strong solvents such as DMSO and similarly harsh solvents. Re-usable. They feature a tight seal to the plate so there is no sample evaporation or well-to-well evaporation. Usable within a wide temperature range: from –80 up to +121 °C.

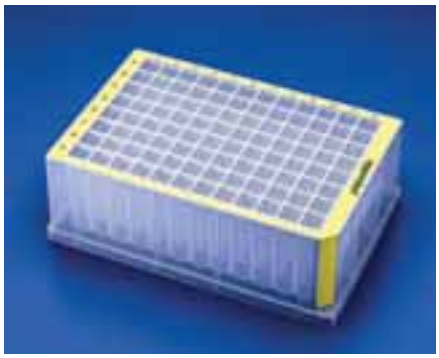
Description	Total Volume	Pk	Cat. No.
Deep 384-well plate, square wells, 120 µl	130 µl	5	**736-0357**
Deep 384-well plate, square wells, 240 µl	250 µl	5	**736-0332**
Deep 384-well plate, square wells, sterile, 240 µl	250 µl	5	**738-1000**

Description	Pk	Cat. No.
Accessories		
AxyMat™ sealing mat for 384-deep well plate with square wells	10	**736-0333**
ImpermaMat™ sealing mat for 384-well plate with square wells	10	**736-0334**

IVD

Deep well plates, Eppendorf Deepwell plate 96 and 384

Eppendorf



PP

For processing, transport and storage of liquids. The well geometry enables high-speed pipetting, excellent mixing and high-speed centrifugation to accelerate both manual and automated work processes. Colour coding makes reading, orientation and manual handling both easier and faster. Available in standard or sterile quality, Eppendorf Deepwell plate 96/500, 96/1000 and 384/200 are also available as DNA LoBind and Protein LoBind quality. DNA LoBind and Protein LoBind plates are certified PCR clean (free from DNase, RNase, human DNA and PCR inhibitors).

- Centrifugation stable and durable in a temperature range of +4 to +40 °C, standard plates can be centrifuged up to 6000 ×g; sterile plates up to 5000 ×g
- High chemical resistance
- Autoclavable (121 °C, 20 min)
- Conforms to SBS standards
- Raised well rims for effective sealing by adhesive seal, heat sealing or sealing mats

Ordering information: Deepwell plate 384/200 and Deepwell plate 96/500 are supplied in packs of 40 plates (5 bags of 8); Deepwell plate 96/1000 and Deepwell plate 96/2000 are supplied in packs of 20 plates (5 bags of 4).

Description	Colour	Pk	Cat. No.
Deepwell plate 384/200 µl			
Standard	White	40	**737-2549**
Sterile	White	40	**737-2554**
Protein LoBind	White	40	**737-2564**
DNA LoBind (also for RNA and other nucleic acids)	White	40	**737-2559**
Deepwell plate 96/500 µl			
Standard	White	40	**737-2500**
Standard	Yellow	40	**737-2501**
Standard	Green	40	**737-2503**
Standard	Blue	40	**737-2504**

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Description	Colour	Pk	Cat. No.
Deepwell plate 96/500 µl			
Sterile	White	40	**737-2515**
Sterile	Yellow	40	**737-2516**
Sterile	Green	40	**737-2518**
Sterile	Blue	40	**737-2519**
DNA LoBind (also for RNA and other nucleic acids)	Blue	40	**737-2534**
DNA LoBind (also for RNA and other nucleic acids)	White	40	**737-2530**
Protein LoBind	White	40	**737-2540**
Protein LoBind	Yellow	40	**737-2541**
Deepwell plate 96/1000 µl			
Standard	White	20	**737-2505**
Standard	Yellow	20	**737-2506**
Standard	Green	20	**737-2508**
Standard	Blue	20	**737-2509**
Sterile	White	20	**737-2520**
Sterile	Yellow	20	**737-2521**
Sterile	Green	20	**737-2523**
Sterile	Blue	20	**737-2524**
Protein LoBind	White	20	**737-2544**
Protein LoBind	Yellow	20	**737-2545**
DNA LoBind (also for RNA and other nucleic acids)	White	20	**737-2535**
DNA LoBind (also for RNA and other nucleic acids)	Blue	20	**737-2539**
Deepwell plate 96/2000 µl			
Standard	White	20	**737-2510**
Standard	Yellow	20	**737-2511**
Standard	Green	20	**737-2513**
Standard	Blue	20	**737-2514**
Sterile	White	20	**737-2525**
Sterile	Yellow	20	**737-2526**
Sterile	Green	20	**737-2528**
Sterile	Blue	20	**737-2529**

Description	Pk	Cat. No.
Accessories		
Deepwell mat 96 for 1.2 ml plate	50	**713-2644**
Deepwell mat 96 for 2.2 ml plate	50	**713-2646**

Storage plates, 96-well, V-bottomed, ABgene®
Thermo Scientific

PP

- V-bottomed well design for optimal sample recovery
- Reinforced skirt for robotic manipulation
- 0,2 ml maximum well volume

Description	Pk	Cat. No.
V-bottomed 96-well storage plate	100	**732-4942**

Deep well storage plates, 96-well, 0,8 ml, ABgene®
Thermo Scientific

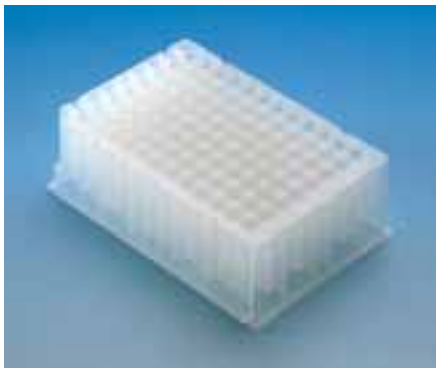
PP

96-well plates with square wells for sample storage.

- 0,8 ml working volume when sealed with adhesive or heat seals, 0,7 ml when sealed with storage plate cap strips or 0,55 ml when sealed with a 96-cap sealing mat
- Conical well bottom for ease of sample retrieval

Description	Colour	Pk	Cat. No.
Storage plate, 0,8 ml	Black	50	**732-5015**
Storage plate, 0,8 ml	White	50	**732-5016**
Storage plate, 0,8 ml	Natural	50	**732-4871**
Storage plate, 0,8 ml, bulk packed	Natural	50	**732-4900**

Deep well storage plates, 96-well, 1,2 ml, ABgene®
Thermo Scientific



PP

96-well plates with round wells for storage and screening applications.

- 1,2 ml working volume when sealed with adhesive or heat seals, 1,1 ml when sealed with storage plate cap strips or 1,0 ml when sealed with 96-cap sealing mat
- U-shaped well bottom to aid resuspension

Description	Colour	Pk	Cat. No.
Storage plate, 1,2 ml, bulk packed	Natural	50	**732-4883**
Storage plate, 1,2 ml, individually wrapped	Natural	50	**732-4821**

Deep well storage plates, 96-well, 2,2 ml, ABgene®
Thermo Scientific

PP

96-well plates with square wells for storage and screening applications, as well as growth of bacterial cultures when used in conjuction with gas permeable adhesive seals.

- 2,2 ml working volume when sealed with adhesive or heat seals or 1,8 ml when sealed with 96-cap sealing mat
- U-shaped well bottom to aid resuspension

Description	Colour	Pk	Cat. No.
Storage plate, 2,2 ml, individually wrapped	Natural	50	**732-4843**
Storage plate, 2,2 ml, bulk packed	Natural	50	**732-4884**

Deep well storage plates, 96-well, 2,2 ml, Mark II, ABgene®
Thermo Scientific

PP

96-well plates with round wells for storage and screening applications.

- 2,2 ml working volume when sealed with adhesive or heat seals or 1,8 ml when sealed with 96-cap sealing mat
- Conical well bottom for ease of sample retrieval
- Raised rim design with support and stacking ring

Colour: Natural

Description	Colour	Pk	Cat. No.
Storage plate, 2,2 ml, Mark II	Natural	50	**732-4910**

Cap sealing mats for 96-well storage plates, ABgene®
Thermo Scientific

Round or square capped mats for sealing 96-well storage plates.

- Alphanumeric grid-referencing to aid sample identification
- Autoclavable or pierceable formats
- Pierceable mats are solvent resistant (including DMSO)
- Flexible design

Colour: Clear

Description	Feature	Pk	Cat. No.
Sealing mat, round cap, pierceable	non-autoclavable	50	**732-4822**
Sealing mat, square cap, pierceable	non-autoclavable	50	**392-0507**
Sealing mat, round cap	autoclavable	50	**732-4846**
Sealing mat, square cap	autoclavable	50	**732-4847**

Storage plates, 1,2 ml square well, low profile, ABgene®
Thermo Scientific

PP

The square well geometry of this 96-well plate makes it ideal for bacterial growth applications.

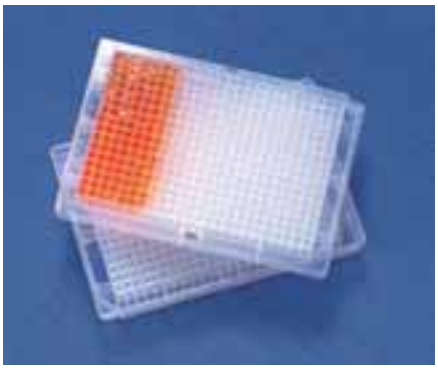
- Low profile design maximises centrifuge capacity, allowing more plates to be loaded per run
- U-shaped well bottom aids re-suspension

Maximum well volume (when heat sealed): 1,2 ml

Maximum well volume (when sealed with 96-cap sealing mat): 1,0 ml

Description	Pk	Cat. No.
Storage plate, square well, low profile	50	**736-0198**

Storage plates, 384-well, ABgene®
Thermo Scientific



PP

384-well plates with square wells for storage or transport of small volumes.

- Maximum well volume 120 µl
- Pyramidal well bottom for ease of sample retrieval
- Discrete raised rim around each well for effective sealing and to reduce cross-contamination
- Additional raised corner rims to protect edges of seals

Colour: Natural

Description	Colour	Pk	Cat. No.
Storage plate, 384-well	Natural	50	**732-4879**

Plates, 96-well, ABgene®
Thermo Scientific

PP

Ideal for compound storage, screening and culturing applications.

- 96 round wells - maximum well volume 370 µl
- U-shaped well bottom
- Alphanumeric grid-referencing and industry standard footprint
- Supporting ribs to aid stacking and improve centrifugation performance

Colour: Natural

Description	Pk	Cat. No.
Standard microplate, PP, 370 µl	100	**732-4885**

ALL YOU NEED FOR GENOMICS

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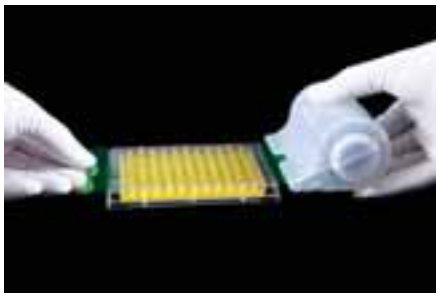
Sealing film dispenser



A convenient dispenser for sealing standard-format microplates with sheeted-roll format adhesive films. The moulded polypropylene dispenser provides a protective enclosure for films on the roll prior to dispensing. It can be opened, permitting insertion of a new roll, then closed and latched securely by means of clasps at each side of its film-dispensing lip. Individual films on the roll are delineated by non adhesive colour bands that serve as end-tabs for positioning the films on the microplates. The bands also act as markers to show when the end of one film has been reached so that the next film is not pulled prematurely from the dispenser. Each non adhesive band contains two perforations, the first of which, bounded by a small indent at the edges, tears easily to separate the sheet being dispensed from the next sheet on the roll. The second perforation permits the end-tab to be removed from the plate once the film has been applied.

- Protects unused seals
- Up to three times faster than applying sheet films by hand
- Reduced waste - no protective backings to remove and discard
- Smooth lower surface for pressing film to the plate
- Available sterile or non sterile

Delivery information: Supplied separately or as part of a Starter Pack which includes 2 film rolls.

Description	Material	Pk	Cat. No.
Sealing film dispenser	Polypropylene	1	**731-0317**
Sealing film dispenser, sterile	Polypropylene	1	**731-0318**

Sealing film for ELISA and general incubation

Polyester film with acrylic adhesive

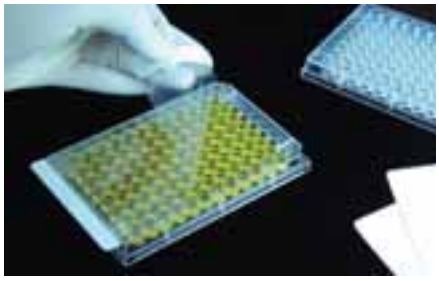
These non pierceable films in sheeted-roll format are recommended for ELISA tests, general incubation and short-term storage.

- Recommended temperature range from –40 to +120 °C
- Total thickness 63 µm (film 38 µm, adhesive 25 µm)
- Prescored films separated by green colour bands for easy application
- Minimise evaporation and prevent contamination between wells

Each roll contains sufficient film to cover 100 microplates.

Description	Pk	Cat. No.
Starter kit including dispenser and 2 film rolls	1 KIT	**731-0309**
Starter kit including dispenser and 2 film rolls, sterile	1 KIT	**731-0310**
Replacement rolls	2 Roll	**731-0311**
Replacement rolls, sterile	2 Roll	**731-0312**

Polyester films for ELISA and general incubation



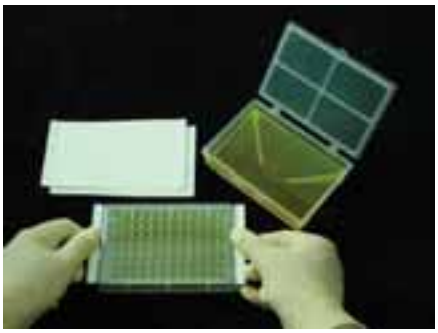
These 50 µm thick polyester films provide secure sealing around every well, not just a cover, thus minimising evaporation, preventing spillage and well-to-well contamination, and eliminating "edge effects" in sensitive ELISA assays. Polyester films can also be used with tissue culture plates for short-term storage, incubation, and containment of biohazards.

- Functional temperature range from –40 to +120 °C
- Available sterile and non sterile
- Non pierceable

Each film L×D: 146,1×79,4 mm

Description	Pk	Cat. No.
Polyester films, non sterile	100	**391-1250**
Polyester films, sterile	100	**391-1251**

Polyester sealing film



Polyester film, acrylic adhesive

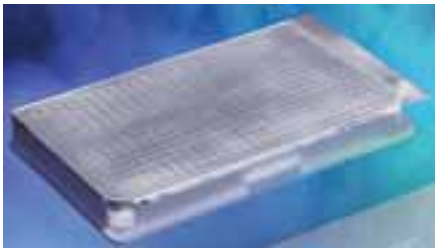
These 50 µm thick polyester films minimise evaporation and prevent spillage and contamination between wells.

- Recommended temperature range from –40 to +120 °C
- Available sterile and non sterile
- Marginally pierceable by single channel pipette

Each film L×D: 141,0×79,4 mm

Description	Pk	Cat. No.
Polyester sealing film	100	**731-0319**
Polyester sealing film, sterile	100	**731-0320**

Aluminium foil seals for cold storage



Aluminium foils with biologically inert adhesive. These foils are easily pierced by manual or automated pipette tips, for sample recovery without generation of aerosols or cross-contamination.

- Recommended for temperatures from –80 to +130 °C
- Not recommended for PCR

Each foil L×D: 133×82 mm

Description	Pk	Cat. No.
Aluminium foils, non sterile	100	**391-1275**
Aluminium foils, sterile	50	**391-1296**

Sealing film, self-adhesive for fluorescence measurement
Brand

Black sealing film made of vinyl is highly suitable for fluorescence measurements because of its light-absorbing characteristics. Temperature range: –40 to +80 °C.

Description	Pk	Cat. No.
Sealing film, self-adhesive, for fluorescence measurement, vinyl, black, single sheets	50	**738-3001**

Microplate sealing mats
Biotix

Silicone

Specially designed for Biotix deep well and assay plates, these reusable sealing mats are cost-effective and ideal for sample processing and storage applications. Biotix sealing mats are made of high quality research-grade silicone, giving them the ability to withstand repeated autoclaving, bleach and ethanol rinses.

- Mats for 96-well plates are pre-scored for piercing with standard pipette tips
- 384-style sealing mats are pierceable with a syringe
- All mats can support use in a wide temperature range, from –80 to +121 °C

Description	Pk	Cat. No.
Plate sealing mat, 96-square well, pre-scored with '+' over each well	10	**732-2484**
Plate sealing mat, 96-round well, pre-scored with '--' over each well	10	**732-2485**
Plate sealing mat, 96-round well, pre-scored with '+' over each well	10	**732-2486**
Plate sealing mat, 384-square well, pierceable	10	**732-2487**