porvair sciences

The Specialist for Microplates

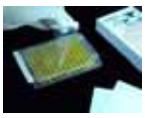
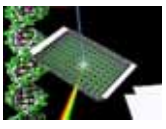
Dunn Labortechnik

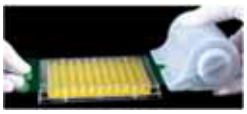
Consumables

Brochure 2020

Would you like to seal your plates?
Do not hesitate to ask for our separate price list on seals and sealing devices!

Heat Sealer
MiniSeal II

Heat- and adhesive foils
in single or roll format

porvair sciences · EXCEL Scientific Inc. · J.G. Finneran Associates, Inc.

AutoCapper, MatCapper
and Sealing Mats

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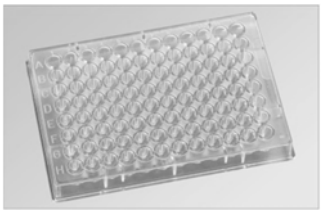
Content

Abbreviations:

COP: Cyclo-Olefin-Copolymer
PP: Polypropylene
PC: Polycarbonate
TC: Tissue Culture
PE: Polyethylene
PS: Polystyrene
PVDF: Polyvinylidenfluorid
TPE: Thermoplastic Elastomer
PES: Polyethersulfon
PTFE: Polytetrafluorethylene
SPE: Solid phase extraction
UHMW: ultra high molecular weight

Microtest plates for Life Sciences



96-wells, clear, with flat, round or V-bottom

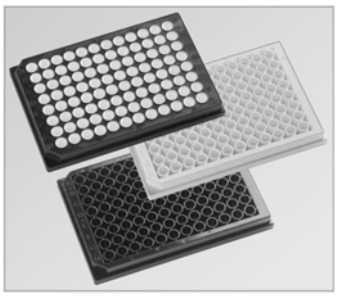
- Manufactured from high quality crystal polystyrene
- Flat bottom for spectrophotometric work
- V-bottom minimizing residual liquid
- Round (U) bottom for cell/particulate collection
- Robot compatible
- Working volumes from 275 µl down to 10 µl
- **NEW!** Also available sterile and packed individually

Cat. No.	Description	VE
210004	96-well, 200 µl volume, PS, clear, V-bottom	100
210104	Same as 210004 but **sterile** and packed individually	100 x 1
209004	96-well, 270 µl volume, PS, clear, round bottom	100
209104	Same as 209004 but **sterile** and packed individually	100 x 1
208004	96-well, 350 µl volume, PS, clear, flat bottom	100
208104	Same as 208004 but **sterile** and packed individually	100 x 1
500268	96-well, 350 µl volume, premium quality PS, clear, flat bottom	100
500269	96-well, 350 µl volume, premium quality PS, clear, flat bottom TC treated, with lid, packed individually, **sterile**	50

96-wells, assay plates

Specifically designed for absorbance, fluorescence, luminescence and scintillation applications. The design uses the most popular 96-well format with standard 'chimney' wells to overcome optical crosstalk and contamination.

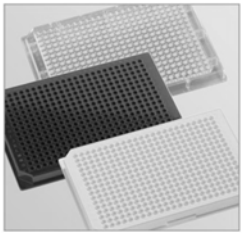
- The acclaimed composite black/white plate has been shown to be ten times more sensitive than a standard white plate for chemi-luminesence assays.
- Black plates designed for top reading fluorescence instruments
- Black plates have low background fluorescence and minimise light scattering
- White plates maximise signal for luminescence readers
- Highly polished well to give better readings
- Specially designed plate featuring a white well set in a black matrix to overcome the problem of a very high luminescence causing false positives
- Working volumes of 350 µl/well
- Conform to ANSI/SLAS standards
- Alphanumerically labelled wells mean samples can be easily traced



Cat. No.	Description	Cs.
204003	96-well, 350 µl, PS, white, bulk package, with lid, **sterile**	100
204512	96-well, 350 µl, PS, white, TC treated, with lid, packed individually, **sterile**	50
204012	96-well, 350 µl, PS, white, TC treated, with lid, packed individually, **sterile**	100
205503	96-well, 350 µl, PS, black	50
205003	96-well, 350 µl, PS, black, bulk package, with lid, **sterile**	100
205512	96-well, 350 µl, PS, black, TC treated, with lid, packed individually, **sterile**	50
205012	96-well, 350 µl, PS, black, TC treated, with lid, packed individually, **sterile**	100
301004	96-well, 350 µl, PS, black with white wells	100

384-well, low volume assay plates - round wells

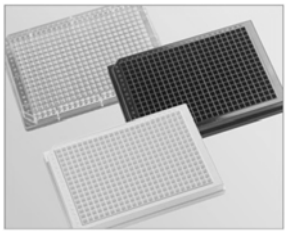
- Especially round wells
- Rounded well rims prevent build-up of drops
- Designed for fluorescence, luminescence or ELISA
- Black and transparent polystyrene plates
- Total volume: 30 µl / well
- Standard height of 14,7 mm for automation



Cat. No.	Description	Cs.
221103	384-well, 30 µl, PS, round wells, clear	50
223103	384-well, 30 µl, PS, round wells, black	50

384-well plate - square wells

- Designed to reduce well-to-well crosstalk
- Black plates have low background fluorescence and minimise light scattering
- White plates enhance bio- & chemi-luminescence signals and have low background luminescence and fluorescence
- Well working volumes of 120 µl
- Rounded square at the well bottom to reduce wicking
- Low residual volume
- Conform to ANSI/SLAS standards
- Alphanumerically labelled wells mean samples can be stored and easily traced

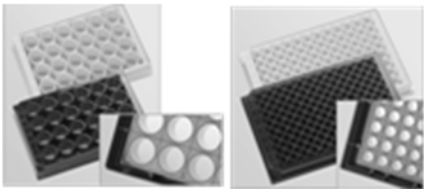


Cat. No.	Description	Cs.
221003*	384-well, 120 µl, PS, clear, bulk package	100
221509*	384-well, 120 µl, PS, clear, TC treated, with lid, packed individually, **sterile**	50
221009*	384-well, 120 µl, PS, clear, TC treated, with lid, packed individually, **sterile**, bulk package	100
222503*	384-well, 120 µl, PS, white	50
222003*	384-well, 120 µl, PS, white, bulk package	100
222509*	384-well, 120 µl, PS, white, TC treated, with lid, packed individually, **sterile**	50
222009*	384-well, 120 µl, PS, white, TC treated, with lid, packed individually, **sterile**, bulk package	100
223503*	384-well, 120 µl, PS, black	50
223003*	384-well, 120 µl, PS, black, bulk package	100
223509*	384-well, 120 µl, PS, black, TC treated, with lid, packed individually, **sterile**	50
223009*	384-well, 120 µl, PS, black, TC treated, with lid, packed individually, **sterile**, bulk package	100

* Only a few plates left, please ask!

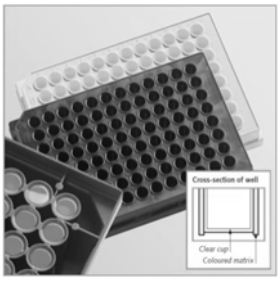
24-, 96- and 384-well Krystal™

- Clear plate bottom permits direct microscopic viewing
- Opaque walls to prevent well-to-well crosstalk
- Thickness of bottom: 0.75 mm (24- and 96-well), 0.40 mm (384-well)
- For use with top- or bottom- measuring devices
- Maintaining the standard ANSI/SBS format
- Well volume: 3.1 ml (24-well), 350 µl (96-well) und 120 µl (384-well)
- Constructed from ultrapure grade polystyrene
- TC-treated plates with lid and sterile
- 384-well plates have a market leading plate flatness (+/- 0.1mm tolerance) that translates into a significant increase in measurement precision and elimination of read errors when performing cell based assays



Cat. No.	Description	Cs.
303002	24-well Krystal™, 3.1 ml, PS, white	68
303006	24-well Krystal™, 3.1 ml, PS, white, TC treated, with lid, packed individually, **sterile**	56
303008	24-well Krystal™, 3.1 ml, PS, black	68
303012	24-well Krystal™, 3.1 ml, PS, black, TC treated, with lid, packed individually, **sterile**	56
214003	96-well Krystal™, 350 µl, PS, white	100
214006	96-well Krystal™, 350 µl, PS, white, TC treated, with lid, packed individually, **sterile**	100
215003	96-well Krystal™, 350 µl, PS, black	100
215006	96-well Krystal™, 350 µl, PS, black, TC treated, with lid, packed individually, **sterile**	100
311001	384-well Krystal™, 120 µl, PS, white	100
311003	384-well Krystal™, 120 µl, PS, white, TC treated, with lid, packed individually, **sterile**	100
312001	384-well Krystal™, 120 µl, PS, black	100
312003	384-well Krystal™, 120 µl, PS, black, TC treated, with lid, packed individually, **sterile**	100

96-well Krystal™ 2000



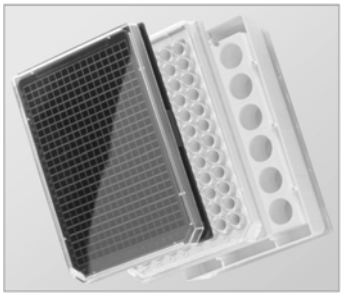
The unique Krystal™ 2000 plate range from Porvair Sciences has been optimised for luminescence and fluorescence assays. A patented manufacturing process provides clear, individual wells in an opaque matrix. The special design of the plate totally eliminates the well-to-well optical crosstalk inherent with other clear bottomed microplate designs, giving unmatched accuracy, sensitivity and repeatability of photometric readings.
Very high signal-to-noise ratio and low detection limits can be achieved with this superb plate. All tissue-culture treated plates are supplied lidded and sterile, in individual bags.

- Raised rims to prevent well-to-well crosstalk
- Lowered bottom rim to stop lateral light piping
- Clear well bottom permits direct microscopic viewing
- For use with top or bottom reading instruments
- Conform to ANSI/SLAS standards
- Total well volume of 350 µl
- White matrix provides for maximum reflectivity, allowing high sensitivity luminescence assays
- Black matrix provides a quenching of background fluorescence, reducing false positives
- Constructed from ultra-pure grade polystyrene

Cat. No.	Description	Cs.
301010	96-well Krystal™ 2000, 350 µl, PS, white, bulk package	100
301512	96-well Krystal™ 2000, 350 µl, PS, white, TC treated, with lid, packed individually, **sterile**	50
301012	96-well Krystal™ 2000, 350 µl, PS, white, TC treated, with lid, packed individually, **sterile**, bulk package	100
301002	96-well Krystal™ 2000, 350 µl, PS, black, bulk package	100
301506	96-well Krystal™ 2000, 350 µl, PS, black, TC treated, with lid, packed individually, **sterile**	50
301006	96-well Krystal™ 2000, 350 µl, PS, black, TC treated, with lid, packed individually, **sterile**, bulk package	100

Krystal™ glass bottom plate

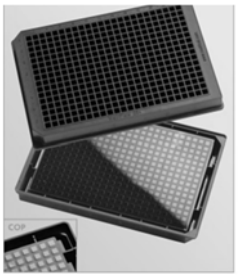
Krystal™ glass bottom plates consist of a polystyrene upper part and a clear borosilicate glass sheet fixed to the base with a proprietary adhesive. This process results in consistent flatness of the base and gives improved light transmission whilst maintaining a flat optical plane for growing cells. The nominal cut-off wavelength of 335 nm allows most fluorescence assays to be excited or read through the glass bottom.



- High quality plate for whole plate CCD imaging and applications with laser
- Manufactured from polystyrene and borosilicate glass (thickness 175 µm)
- 24-, 96- and 384-well plates
- Very low autofluorescence
- High degree of planar flatness (± 30 µm flatness across base)
- Biocompatible adhesive
- Chemical resistance against alcohol, DMSO and PBS
- Robot-friendly, conform to ANSI/SLAS standards
- Optical “cut-off“ at a wavelength of 335 nm
- For measurements between 350 - 700 nm

Cat. No.	Description	Cs.
324041	24-well, glass bottom, black, with lid, packed individually	10
324042	24-well, glass bottom, black, with lid, packed individually, **sterile**	10
324051	24-well, glass bottom, white, with lid, packed individually	10
324052	24-well, glass bottom, white, with lid, packed individually, **sterile**	10
324001	96-well, glass bottom, black, with lid, packed individually	10
324002	96-well, glass bottom, black, with lid, packed individually, **sterile**	10
324011	96-well, glass bottom, white, with lid, packed individually	10
324012	96-well, glass bottom, white, with lid, packed individually, **sterile**	10
324021	384-well, glass bottom, black, with lid, packed individually	10
324022	384-well, glass bottom, black, with lid, packed individually, **sterile**	10
324031	384-well, glass bottom, white, with lid, packed individually	10
324032	384-well, glass bottom, white, with lid, packed individually, **sterile**	10

Krystal™ COP-bottom plates (UV-transparent)



Recently, scientists have begun using chemistries which require excitation or detection wavelengths in the far UV region, below 350 nm (e. g. confocal microscopy). Porvair Sciences has introduced a very high specification COP-bottomed (Cyclo-Olefin-Polymer), UV-transparent microplate for those experiments.

- 220 nm UV “cut-off“
- Very low autofluorescence
- High degree of planar flatness
- Biocompatible adhesive
- Robot-friendly, conform to ANSI/SLAS standards
- High chemical resistance to most solvents
- Working volume of 120 µl

Cat. No.	Description	Cs.
327001	384-well Krystal™ transparent COP-bottom plate, 120 µl, black, square wells	32

Krystal™ plates with quartz bottom (black and UV-transparent)

The quartz bottom of the UV-transparent plates allow applications which require excitation or detection of wavelengths between 200 nm - 900 nm.

Cat. No.	Description	Cs.
325001	96-well Krystal™ plate with quartz bottom	1
325011	96-well Krystal™ plate with quartz bottom	10
325051	96-well Krystal™ plate with quartz bottom	50
325002	384-well Krystal™ plate with quartz bottom	1
325012	384-well Krystal™ plate with quartz bottom	10
325052	384-well Krystal™ plate with quartz bottom	50

Krystal™ plates from chemically resistant quartz (autoclavable)

The solid transparent quartz bottom of the Krystal™ plate is chemically resistant. The plates are autoclavable and can be used several times.
The Krystal™ plates from solid quartz allow applications which require excitation or detection of wavelengths between 190 nm - 900 nm.

Cat. No.	Description	Cs.
500222	96-well Krystal™ plate, solid quartz (transparent)	1

Would you like to concentrate your samples or evaporate organic solvents?

Please ask for our price list on evaporators!

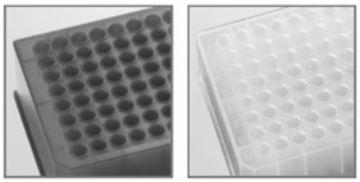
Ultravap™ Mistral

MiniVap™

Deep-well Plates

Collecting and storage of liquids in cell biology, molecular biology and drug research.

96-well plates, round wells



- Manufactured from pre-tested polypropylene for low extractables
- Alphanumeric grid-referencing
- Partly DNase/ RNase free^{O}
- Also available in red, blue or black!
- 14.7 mm or 42 mm high
- Rimmed version to stop cross contamination and enable a better seal
- Non rimmed version to allow insertion of vials, or where the seal is not crucial
- Cylindrical well with round bottom for optimal mixing and recovery
- Very easy to use with automated sample handling systems
- Can be stored at -80 ºC

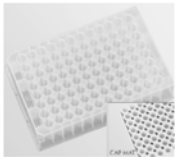
Cat. No.	Description	Cs.
208003	96-well, 350 µl, 14.7 mm high, PP, flat bottom, elevated rim	100
208103	Same as 208003 but **sterile** and packed individually	100 x 1
209003	96-well, 270 µl, 14.7 mm high, PP, round bottom, elevated rim	100
209103	Same as 209003 but **sterile** and packed individually	100 x 1
210003	96-well, 220µl, 14.7 mm high, PP, V-bottom, elevated rim	100
210103	Same as 210003 but **sterile** und packed individually	100 x 1
219002^{O}	96-Deep well, 1 ml, 42 mm high, PP, round wells, elevated rim	50
219002FP ^{O}	→ Complete palette of 219002 (34 x 50)	34 x 50
219012^{O}	96-Deep well, 1 ml, 42 mm high, PP, round wells, elevated rim, **sterile**	50
219037^{O}	96-Deep well, 1 ml, 42 mm high, PP, round wells, rimless	50
219037FP^{O}	→ Complete palette of 219037 (34 x 50)	34 x 50
219432	96-Deep well, 1 ml, 42 mm high, PP, round wells, elevated rim, blue	50
219422	96-Deep well, 1 ml, 42 mm high, PP, round wells, elevated rim, red	50
219412^{O}	96-Deep well, 1 ml, 42 mm high, PP, round wells, elevated rim, black	50
219412FP^{O}	→ Complete palette of 219412 (34 x 50)	34 x 50

96-well plates, round wells, for magnetic separation

- Optimized performance on liquid handling automated platforms and manual workstations with locators for incubation functionality and/or magnetic separations
- Bottom geometry of the plates easily fits over heating and cooling post arrays designed to fit between the well walls

Cat. No.	Description	Cs.
360121	96-Deep well, 1 ml, 32 mm high, PP, round wells, elevated rim	25
360122	96-Deep well, 1 ml, 32 mm high, PP, round wells, elevated rim, **sterile**	25
360123	96-Deep well, 1 ml, 32 mm high, PP, round wells, elevated rim, white	25

96-well plates, round wells, low profile



- Only 27 mm high
- 1.1 ml wells with a working volume of 1 ml
- Designed to stack for easy storage

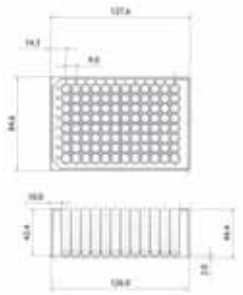
Cat. No.	Description	Cs.
219250	96-well plates, 1.1 ml, 27 mm high, PP, round wells	50
219251	Thermoplastic elastomer sealing mat for 219250	100

Centrifuge Adapter for 1 and 2 ml Deep well plates

- Applicable at the bottom of the plate
- Special design for deep well plates
- Allows to centrifuge up to 3.500 x *g* without the danger of plate deformation or spilling of liquids
- Also supports bead-based separation assays

Cat. No.	Description	Cs.
500150	Centrifuge adapter for 219008 & 219026 (1 ml, square wells, see p. 8), orange	2
500114	Centrifuge adapter for 219009 & 219027 (2 ml, square wells, see p. 8)	2
500180	Centrifuge adapter for 219020 & 219021 (2 ml, round wells, see p. 8)	2
500201	Centrifuge adapter for 219030 (2 ml, square wells, see p. 10)	2

Innovative 96-well plate with round wells and actual 2 ml volume

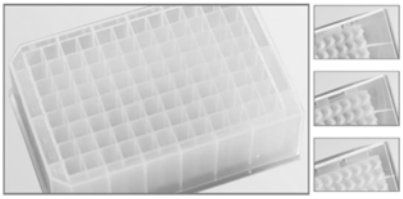


- Total volume 2.075 ml, working volume 1.85 ml, only 45 mm high
- From ultra-pure PP, storage at -80 °C possible
- Round bottom for easy removal of liquids
- Easy to seal with suitable seal or mat
  (please ask for our separate price list “Sealers and Seals“)
- DNase- and RNase-free
- Packed in sealed sleeves of 5 plates
- Alphanumeric grid-referencing

Cat. No.	Description	Cs.
219020*	96-well, 2 ml, 45 mm high, PP, round wells, 2 ml / well	50
219020FP*	→ Complete palette (34 x 50)	34 x 50
219021*	Same as 219020, but **sterile**	50
219021FP*	→ Complete palette (34 x 50)	34 x 50
500179	Silicon sealing mat for 219020 and 219021	50

** centrifuge only with centrifuge adaptor (see p. 7)*

96-well plates, square wells

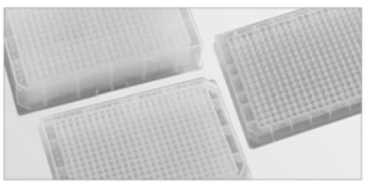


- One geometry - 3 different working volumes: 350 µl, 1 ml, 2 ml
- 44 mm high with V-bottom for total removal of liquid
- Raised well rims to improve heat sealing
- Partly DNase- and RNase-free^{O}
- Designed to work in automation, conform to ANSI/SLAS standards
- No inner edges to allow better collection of magnetic beads
- Suitable sealing mat available – see below and in our separate price list “Sealers and Seals“

Cat. No.	Description	Cs.
219006^{O}	96-well, 350 µl, 44 mm high, PP, square wells	50
219006FP	→ Complete palette (34 x 50)	34 x 50
219025^{O}	Same as 219006, but **sterile**	50
219008 *	96-well, PP, 1 ml, 44 mm high, PP, square wells	50
219008FP*	→ Complete palette (34 x 50)	34 x 50
219026 *^{O}	Same as 219008, but **sterile**	50
219026FP	→ Complete palette (34 x 50)	34 x 50
219009 *^{O}	96-well, PP, 2 ml, 44 mm high, PP, square wells	50
219009FP*	→ Complete palette (34 x 50)	34 x 50
219027 *^{O}	Same as 219009, but **sterile**	50
219027P *	→ Complete palette (34 x 50)	34 x 50
219030	96-well, 2 ml, 44 mm high, PP, square wells (also see p. 10)	50
219031	Same as 219030, but **sterile** (also see p. 10)	50
219033	PP-sealing mat, square wells for 219030 and 219031	50
219004	EVA-sealing mat, square wells for 219009, 219027, 219030 and 219031	50
500182	Silicone-sealing mat, square wells with double O-ring for 219009 and 219027	50

** centrifuge only with centrifuge adaptor (see p. 7)*

384-well plates, square wells



- Working volume of 58 µl or 300 µl
- From ultrapure PP, storage at -80 °C possible
- Conform to ANSI/SLAS standards
- Designed to allow almost total removal of liquid sample
- Partly DNase- and RNase-free^{O}
- Extra flat - allows sealing

Cat. No.	Description	Cs.
224001	384-Well, 58 µl, 14 mm high, PP, square wells, round bottom	60
219040^{O}	384-Well, 300 µl, 30 mm high, PP, square wells, V-bottom	48
219040FP	→ Complete palette (34 x 48)	34 x 48
219041 ^{O}	Same as 219040, but **sterile**	48

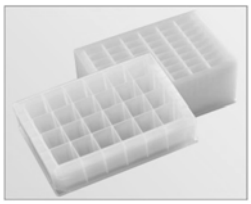
NEW!

Deep-well plates with low profile for high throughput applications

- Raised well rims for reliable closing with heat sealing
- Easy stacking, conform to ANSI/SLAS standards
- Low profile is ideal for automation e. g. applications with liquid handling systems
- Good centrifugation stability up to 6.000 x *g* for faster protocols
- DNase- and RNase-free without plasticizers, slip agents or biozides
- Autoclavable
- Optional available with barcoding → Contact us for further information.
- Suitable sealing mats available - see below and in our separate price list “Sealers and Seals”

Cat. No.	Description	Cs.
500284	96-Well, 1 ml, 33 mm high, PP, round wells, round bottom	50
500285	96-Well, 1 ml, 24.4 mm high, PP, square wells, round bottom	50
500286	96-Well, 1,6 ml, 31.6 mm high, PP, square wells, round bottom	50
500287	96-Well, 2,2 ml, 41.6 mm high, PP, square wells, round bottom	50
500288	96-Well, 2,2 ml, 41.6 mm high, PP, square wells, V-bottom	50
219004	EVA sealing mat, for 96-well plates with square wells for plates 500285, 500286, 500287 and 500288 DNase- / RNase-free, packed individually	50
219036	EVA sealing mat for 96-well plates with round wells for plate 500284 DNase- / RNase-free	50

Large volume deep well plates



- For transport of big volumes. Conform to ANSI/SLAS standards
- 24- or 48-well
- Working volume of 5 to 10 ml
- 44 or 68 mm high
- Fits to universal lid (see page 12)

Cat. No.	Description	Cs.
360013	24-well, 10 ml, 44 mm high, PP, square wells, V-bottom	25
360115	Same as 360013, but **sterile**, packed in sleeves	25
360080	Same as 360013, but **sterile**, with lid and barcode	25
360117	24-Well, 10 ml, 44 mm high, PP, square wells, round bottom	25
360096	48-Well, 4.8 ml, 44 mm high, PP, square wells, V-bottom	25
360002	48-Well, 5 ml, 44 mm high, PP, rectangular wells, V-bottom	25
360004	48-Well, 7 ml, 68 mm high, PP, rectangular wells, V-bottom	30

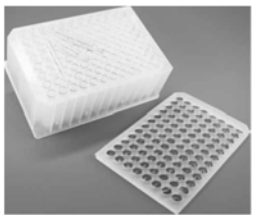
Combination packages of 96-well plates and suitable sealing mats

- Round or square wells
- Well volume of 350 µl, 1 ml or 2 ml
- All packages include a suitable sealing mat

Cat. No.	Description	Cs.
500247	Combination package of 50 pieces 219008 and 219004	1
500248	Combination package of 50 pieces 219006 and 219004	1
500249	Combination package of 50 pieces 219009 and 219004	1
500250	Combination package of 50 pieces 219002 and 219036	1
500251	Combination package of 50 pieces 219037 and 219036	1

Plates for special applications

96-well glass vial storage plate



- 44 mm high
- For storage and transport of hazardous or aggressive solutions in glass vials
- Chemically resistant
- Designed to use for UHPLC
- Suitable sealing mats available - see below

Cat. No.	Description	Cs.
229230	96-well plate for storage of 700 µl glass vials	12
229231	8 x 45 mm pierceable PTFE/Silicon sealing mat, round wells with 1 ml tapered inserts for glass vials	1
229232	Same as 229231 but with flat inserts	1

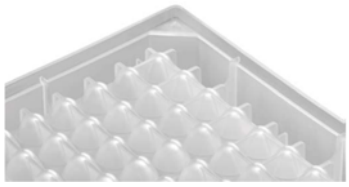
Bacti-growth Plates

- Ideal for growth of bacteria and yeast, mammal and insect cells
- Working volume of 300 µl up to 10 ml per well
- 24- and 96-well plates, conform to ANSI/SLAS standards
- Round or square wells
- With tightly fitting lid or top cover
- Robot friendly

Cat. No.	Description	Cs.
219101	Growth plate, 96-well, 1 ml, PP, round wells, **sterile**	25
219102	Growth plate, 96-well, 2 ml, PP, square wells, **sterile**	25
360080	24-well, 10 ml, PP, square wells, V-bottom, **sterile**, with barcode	25

Plant Genomics Plates

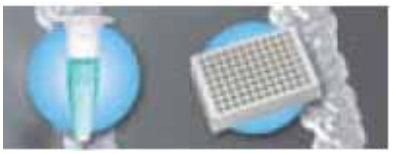
- Ideal for determination of genomic profile of food and commercial crops
- For extraction of plant DNA
- Especially solid and stable plates due to reinforced walls and supporting ribs on the underside of the plate
- Toughened Polypropylene for grinding of seeds and leaves
- Working volume of 1.90 ml
- 44 mm high
- Also available sterile
- DNase- and RNase-free
- Also suitable for analysis of THC/CBD content of cannabis plants



Cat. No.	Description	Cs.
219030	96-well, 2 ml, PP, square wells	50
219030FP	→ Complete palette (34 x 50)	34 x 50
219031	Same as 219030, but **sterile**	50
219031FP	→ Complete palette (34 x 50)	34 x 50
219033	Pierceable sealing mat, PP, square wells for plates 219030 and 219031	50
219004	EVA sealing mat, for 96-well plates with square wells for plates 219030/31, 219006, 219008, 219009, DNase- / RNase-free, packed individually	50

DNA Kits

- Quick and easy handling
- Following kits available: "DNA Purify & Concentrate", "DNA Size Selection", "DNA Extraction and DNA Purification"
- For high throughput in 96-well plates
- Kits include 2 filter plates, 2 collection plates and all necessary buffer
- Filter plates are also available separately, without collection plate and buffers
- Detailed product description available

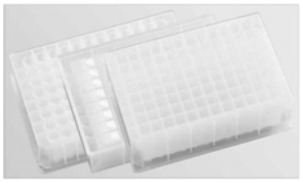


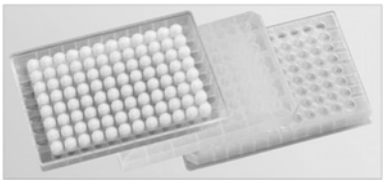
Cat. No.	Description	Cs.
500261*	DNA Extraction, kit	2
500270	DNA Extraction, filterplate only	4
500220*	DNA Purification, kit	2
500272	DNA Purification, filterplate only	4
500240*	DNA Purify & Concentrate, kit	2
500273	DNA Purify & Concentrate, filterplate only	4
500263*	DNA Size Selection, kit	2
500271	DNA Size Selection, filterplate only	4

* available as spin coloumns, please enquire for more information.

Filtration Plates

Filtration plates are used for removal of particulate matter from liquid, for example cell harvesting, DNA separations, isolation of plasmids or binding studies. Either the particulate matter or the filtrate is needed for further study. The filter plates from Porvair Sciences are suitable to use with standard manifolds and of course with the vacuum manifolds from Porvair.





Filter materials:

- Glass fibre
- PES
- PVDF
- PP
- UHMW PE

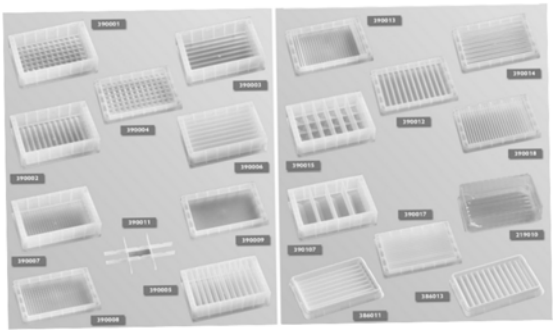
Specifications:

- 48-, 96- or 384-well
- 300 µl - 7.5 ml
- Polypropylen (PP) filterplates
- Long and short drip directors
- Each well has an individual drip for 100 % transfer of the sample
- From ultra pure polypropylen
- Conform to ANSI/SLAS standards
- Suitable for automatic systems
- For vacuum manifolds (also available from Porvair, see page 13)

Cat. No.	Description (pore size in µm)	Cs.
360053	**48-well, 7.5 ml, PP**, long drip, PE Filter, 25 µm	15
360008	48-well, 5 ml, PP, PE Filter, 10-20 µm	25
360047	**96-well, 300 µl, PP,** short drip, UHMW PE, 25 µm	50
360052	96-well, 300 µl, PP, short drip, glass fibre, 0.7 µm	50
360046	96-well, 300 µl, PP, long drip, glass fibre, 0.7 µm	50
360051	96-well, 300 µl, PP, short drip, glass fibre, 1.0 µm	50
360045	96-well, 300 µl, PP, long drip, glass fibre, 1.0 µm	50
360048	96-well, 300 µl, PP, short drip, glass fibre, 1.2 µm	50
360066	96-well, 300 µl, PP, long drip, glass fibre, 3.0 µm	50
360049	96-well, 300 µl, PP, short drip, hydrophilic PVDF, 0.45 µm	50
360043	96-well, 300 µl, PP, long drip, hydrophilic PVDF, 0.45 µm	50
360050	96-well, 300 µl, PP, short drip, PP, 0.45 µm	50
360044	96-well, 300 µl, PP, long drip, PP, 0.45 µm	50
360035	**96-well, 400 µl, PP,** short drip, UHMW PE, 25 µm	25
360026	96-well, 400 µl, PP, long drip, UHMW PE, 25 µm	25
360037	96-well, 400 µl, PP, short drip, hydrophilic PVDF, 0.45 µm	25
360027	96-well, 400 µl, PP, long drip, hydrophilic PVDF, 0.45 µm	25
360038	96-well, 400 µl, PP, short drip, PP, 0.45 µm	25
360020	96-well, 400 µl, PP, long drip, PP, 0.45 µm	25
360062	96-well, 400 µl, PP, short drip, PES, 30 kD, 0.004 µm	25
360029	**96-well, 800 µl, PP**, short drip, UHMW PE, 25 µm	25
360025	96-well, 800 µl, PP, long drip, glass fibre, 0.7 µm	25
360033	96-well, 800 µl, PP, short drip, glass fibre, 1.0 µm	25
360024	96-well, 800 µl, PP, long drip, glass fibre, 1.0 µm	25
360030	96-well, 800 µl, PP, short drip, glass fibre, 1.2 µm	25
360031	96-well, 800 µl, PP, short drip, hydrophilic PVDF, 0.45 µm	25
360023	96-well, 800 µl, PP, long drip, hydrophilic PVDF, 0.45 µm	25
360032	96-well, 800 µl, PP, short drip, PP, 0.45 µm	25
360019	96-well, 800 µl, PP, long drip, PP, 0.45 µm	25
360011	96-well, 800 µl, PP, long drip, PE, 10-20 µm	25
360056	**96-well, 2 ml, PP,** long drip, UHMW PE, 25 µm	25
360057	96-well, 2 ml, PP, long drip, glass fibre, 0.7 µm	25
360058	96-well, 2 ml, PP, long drip, PP, 0.45 µm	25
360059	96-well, 2 ml, PP, long drip, hydrophilic PES, 0.45 µm	25
360021	96-well, 2 ml, PP, long drip, PE, 25 µm	25
360073	**384-well, 140 µl, PP**, long drip, glass fibre, 0.7 µm	10
360108	384-well, 140 µl, PP, long drip, glass fibre, 5.0 µm	10
360082	384-well, 140 µl, PP, long drip, UHMW PE, 25.0 µm	10

Reservoirs for Automation and Universal Lids

- For use with automatic liquid handling systems
- Pyramidic bottom (V) for minimizing dead volume or flat bottom (F)
- Wide range
- Robot friendly
- Chemical and heat resistant (PP)
- Autoclavable
- Gamma irridiation possible
- Conform to ANSI/SLAS standards



Cat. No.	Description	Height in mm	Bottom	Volumes			Cs.
				Partial in ml	Max. in ml	Dead in µl	
390009	Without subdivision	19	F	-	85	-	25
391003	2 columns	44	V	-	288	<270	25
391006	4 columns, partitioned, **sterile**	44	V	-	300	<540	25
390107	4 columns, partitioned	44	V	-	300	<540	25
390015	6 columns, partitioned	44	V	47	282	<82/Sp	25
390002	12 columns	44	V	-	290	<540	25
391004	12 columns, **sterile**	44	V	-	252	<54	25
391001	12 columns, with outer channel	25,6	V	-	170	<500	25
390005	12 columns, partitioned	44	V	21	252	<54/Sp	25
390012	12 columns, partitioned	19	V	7	84	<54/Sp	25
390018	2 x 12 columns, partitioned	19	V	3,5	84	<110/Sp	25
390108	24 columns, partitioned	19	V	3,5	78	<250	25
390111	4 rows, partitioned	44	V	73	292	<500	25
390003	8 rows	44	V	-	300	<82	25
390006	8 rows, partitioned	44	V	32	256	<82	25
391005	8 rows, partitioned	44	V	-	256	<82	25
390014	8 rows, partitioned	19	F	10,6	84	<82/R	25
390017	16 rows, partitioned, low rim	19	V	4,9	78	<18	25
390001	96-well	44	V	-	300	<64	25
390004	96-well	19	V	-	86	<64	25
391002	96-well, black	44	V	-	380	<64	25
390101	96-well, **sterile**	44	V	-	240	<64	25
390007	384-well	44	V	-	282	<7	25
390008	384-well	19	V	-	92	<7	25
390019	384-well	23	V	-	155	<7	25
390016	384-well, 2 controls partitioned row 1	38	V	-	282	<7	25
390013	384-well, 4 controls rows 1, 2, 23, 24 separately	19	V	-	49,3	<120	25
390109	384-well, 4 controls rows 1, 2 partitioned	23	V	-	155	<7	25
219010	Single-use reservoir, **PC**, to use with Porvair Manifolds, **not** autoclavable						25
229125	**Universal Lid**, **PS**, for all 96-well plates in ANSI/SLAS format, transparent						100
229225	**Universal Lid**, **PS**, for all 96-well plates in ANSI/SLAS format, transparent, **sterile**						100
229126	**Universal Lid**, **PS**, for all 96-well plates in ANSI/SLAS format, black						100

Manifolds for SPE, Filter Plates and Automation

Vacuum manifolds are used to suck liquid during solid phase extraction or use of simple filterplates into special collection plates or deep well plates.

MicroLute™ Manifold (Acryl)

- Machined from crystal clear acrylic (top plate) and acetal polymer (plenum chamber)
- Suitable for most filterplates in ANSI/SLAS standard with long drip directors and for SPE plates, i. e. MicroLute™ (see pages 11 to 16)
- Valve controlling knob (on-off) for precise control of vacuum
- Compatible with deep well collecting plates with square wells of 350 µl, 1 ml or 2 ml and plates with a height up to 44 mm
- Airtight sealing through O-ring, removable cover plate
- Medium resistance to alcohols and weak acids

Cat. No.	Description	Cs.
228008	Standard MicroLute™ Manifold for 96-well collecting plates	1
228010	Spacer Insert, PP, 1 ml, for use of round well PP plates (219002, see page 7), optional	1
228012	Spacer Insert, HDPE, for use of 15 mm high plates, optional (208003, 20900, 210003, see page 7), optional	1
219010	Disposable reservoir, PVC	25

Universal Robotic Manifold

- Designed to be easily assembled and disassembled by robotic manipulators
- Compatible with any filterplate type with short, medium or long drip directors (adapter available)
- Automated purification of SPE or DNA clean-up procedures
- Integrated valve for vacuum to provide complete control of vacuum pressure
- Fully compatible with most commercial robotic liquid handling systems
- Able to accommodate collection plates of 14 mm - 44 mm in height
- Chemically resistant

Cat. No.	Description	Cs.
228020	Universal Robotic Manifold, compatible with 96-deep well collection plates	1
228021	Adaptor 1 for plates with half rim / semi long drips	1
228022	Adaptor 2 for plates with short rim / long drips	1

Chart of compatibility for the Universal Robotic Manifold

Manufacturer	Plate type	Base	Adapter 1	Adapter 2
Quiagen™		■	■	
Waters™	Standard	■		
Waters™	µElution	■	■	
Biotage™		■		
Varian™		■		
Phenomenex™		■		
Axygen™		■		■
Seahorse™		■		
Porvair™		■		

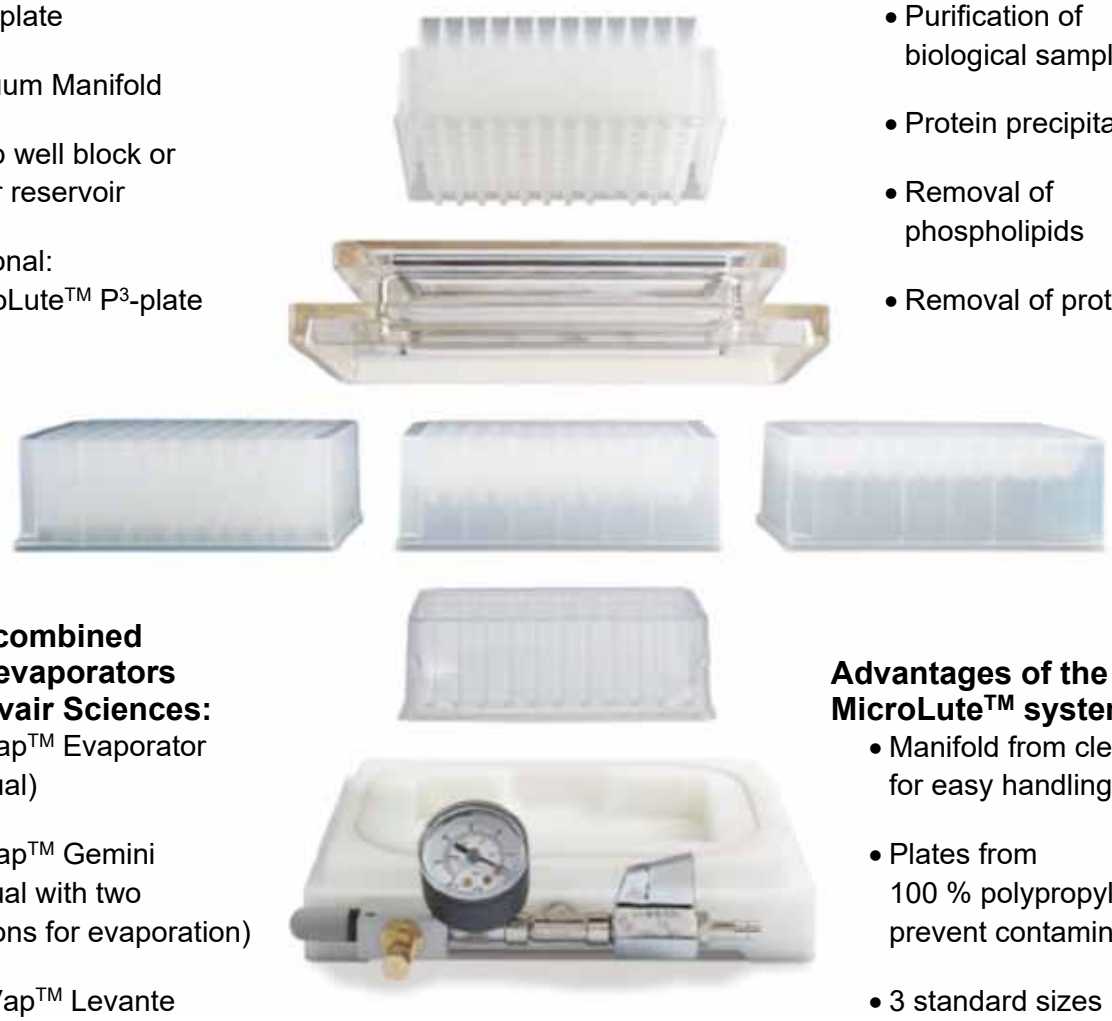
MicroLute™ – a complete 96-well sample preparation system from Porvair Sciences

Components of the MicroLute™ system:

- Filterplate
- Vacuum Manifold
- Deep well block or other reservoir
- Optional: MicroLute™ P³-plate

Fields of application:

- Purification of biological samples
- Protein precipitation
- Removal of phospholipids
- Removal of proteins



Optimal combined with the evaporators from Porvair Sciences:

- MiniVap™ Evaporator (manual)
- MiniVap™ Gemini (manual with two positions for evaporation)
- UltraVap™ Levante (fully automatic)
- UltraVap™ Mistral (fully automatic and robot compatible)

Advantages of the MicroLute™ system:

- Manifold from clear acryl for easy handling
- Plates from 100 % polypropylene prevent contamination
- 3 standard sizes (350 µl, 1 ml and 2 ml) for optimal recovery
- Standardised height of reservoirs

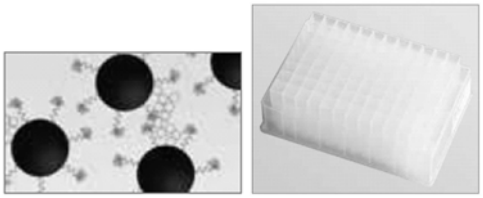
Further information on the following pages!

Solid Phase Extraction – SPE

Porvair offers a wide range of products for Solid Phase Extraction (SPE). The solved sample can be purified and concentrated to be eluted and then analyzed by LC-MS. For classic SPE Porvair offers high quality C18 silica between Vyon-frits.

MicroLute™ BioVyon C8 and C18 Products

BioVyon™ technology allows high-purity silica resins to be supported in a matrix which provides a high surface area whilst reducing channelling through the column. As the porous material is co-sintered under high pressure and temperature with the **BioVyon™** polymer matrix, the resultant frit or column is impervious to further compression and easily resists channelling of liquids, even at high flow rates. The 96-well plates for C8 and C18 are designed for low volumes.

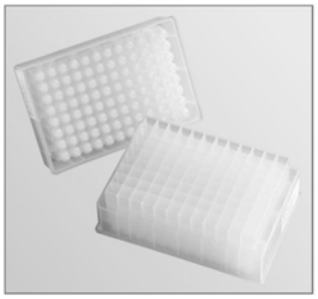


Microstructure of BioVyon substrate

Cat. No.	Description	Cs.
240030	**MicroLute™ BioVyon™ C8** 96-well plate, 10 mg / well	1
240031	**MicroLute™ BioVyon™ C18** 96-well plate, 10 mg / well	1

P³ Protein MicroLute

Protein 'crashes' out of solution and precipitates directly in each well when acetonitrile is added, thus solving all common problems associated with the CRASH technique of protein clean-up.



- Pre-filter frit at 100 µm traps flocculant particles >100 µm
- Secondary frit traps fine protein particles at <10µm
- The frits are hydrophobic and oleophobic. This retains sample/acetonitrile in the well to allow precipitation of proteins until vacuum is applied
- Chemically inert filter material minimizes adsorption of samples
- Frit structure prevents breakthrough of protein particles

Cat. No.	Description	Cs.
240100	**P³** Protein Precipitation Plate	1
240200	**P³** Protein Precipitation Plate (bulk package of 5 pieces)	5
240010	**High efficiency P³** Protein Precipitation Plate, with untreated frits, for samples which are mixed with acetonitrile before added to the plate	1
240080	**P³PL** Protein precipitation and removal of phospholipids plate contains a component which selectively removes ionized phosphor particles	1

MicroLute™ for viscous liquids

Diatomaceous-Earth is known for its big pore size and a high pore volume as well as high pH-resistance (1 - 13). These characteristics allow to separate viscous liquids with high amounts of protein and phospholipids.

For purification of blood, plasma or serum before LC/MS analysis, environment and nutrition analysis as well as extraction of small amounts of water from hydrophobic solvents.

Cat. No.	Description
240079	**P³SLE**, for extraction of liquids from a solid phase (Diatomaceous-Earth)

MicroLute™ Accessories

Cat. No.	Description	Cs.
219010	Single-use reservoir, PVC, collection of disposables	25
219004	Sealing mat, square wells, for upper plate side	50
219005	Drain mat, seals plate bottom	25

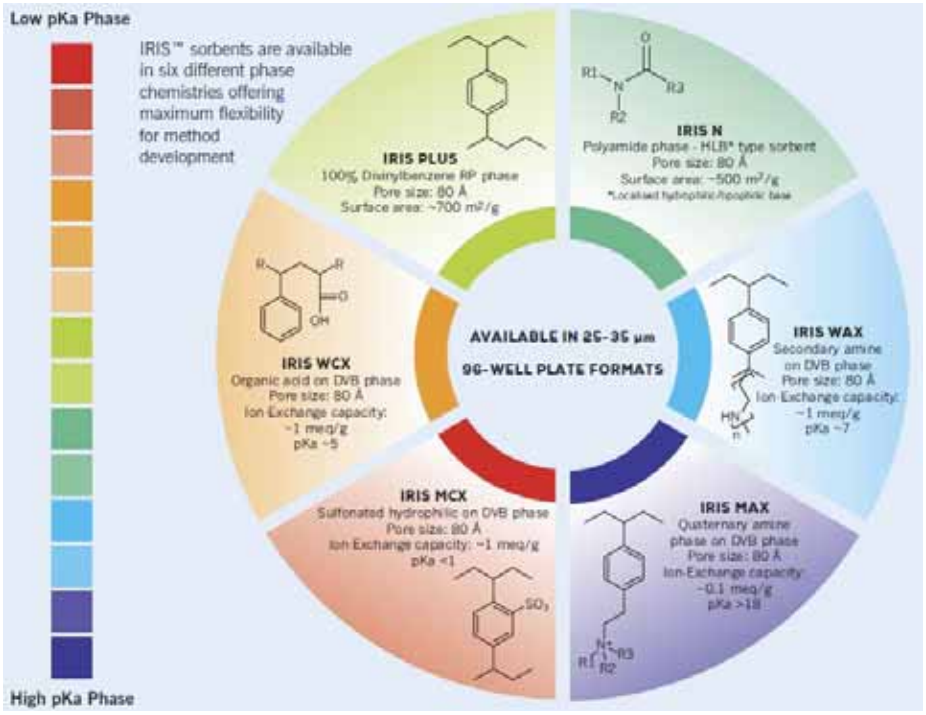
Combinatorial MicroLute™

Combinatorial MicroLute™ allows to use customized sorbents which conform to the requirements of the separation.

- Up to 2 ml sample volume possible
- Low dehydration and support of frits
- 10 mg up to 100 mg sorbent/well compressed
- Up to 4 times faster than classic filter separation
- Plate design ideal for automation, conforms to ANSI/SLAS standards
- Long drips at the wells prevent contamination and ensure to hit the collection plate exactly
- IRIS Polymers are resistant against a wide range of solvents and stable at most pH values
- IRIS Polymers are humidity resistant
- Pore size of IRIS sorbents is 80 Å
- Also available with customized sorbents
  → Please contact us for further information!

Cat. No.	Description	Cs.
240002	Combinatorial - MicroLute™ Platte, uncompressed, with PE-bottom frits, pore size 36 µm	1
600033	Same as 240002 but as bulk package	20
240054	Combinatorial - MicroLute™ plate, uncompressed, with PE-bottom frits, pore size 10 µm	1
240011	Empty 96-well MicroLute chamber without top or bottom frits	40
239007	Bottom frits 1.5 x 7.35 mm, Vyon F PE, pore size 36 µm	1000
239010	Bottom frits 1.5 x 7.35 mm, Vyon T PE, pore size 10 µm	1000

IRIS Sorbents



Cat. No.	Description	Cs.
240055*	Sorbent IRIS N 10 mg (surface ~ 500 m^2/g)	1
240059*	Sorbent IRIS PLUS 10 mg (surface ~ 700 m^2/g)	1
240063*	Sorbent IRIS MCX 10 mg (pKa < 1, Ion exchange capacity, surface ~ 500 m^2/g)	1
240067*	Sorbent IRIS MAX 10 mg (pKa > 18, Ion exchange capacity, surface ~ 500 m^2/g)	1
240071*	Sorbent IRIS WCX 10 mg (pKa ~5, Ion exchange capacity, surface ~ 500 m^2/g)	1
240075*	Sorbent IRIS WAX 10 mg (pKa ~ 7, Ion exchange capacity, surface ~ 500 m^2/g)	1

* further packaging sizes available. Please contact us for information.