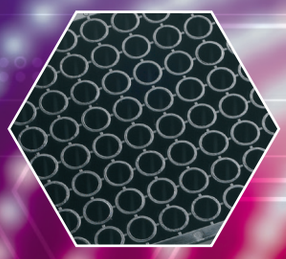
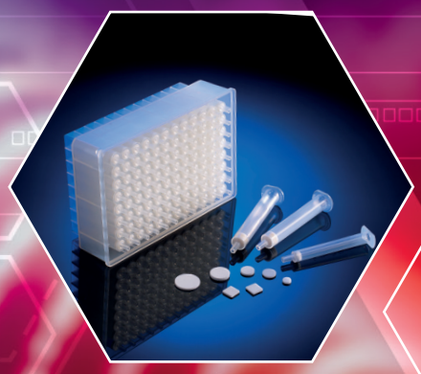
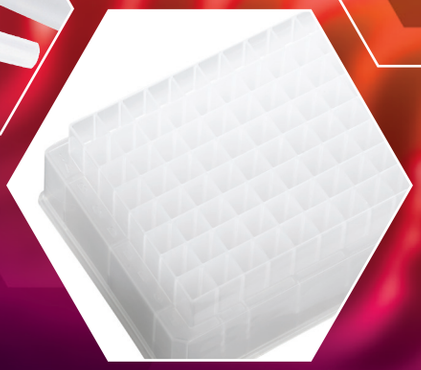
porvair sciences

MICROLUTE™ SAMPLE PREPARATION RANGE BROCHURE







porvair sciences

Porvair Sciences introduces Microlute™, the innovative range of sample preparation products designed and manufactured to deliver uncompromised chromatographic performance with a whole new level of reliability and reproducibility.

With over 30 years' experience in manufacturing porous plastics and microplates for chromatography applications, these unique capabilities have led to the development of the Microlute™ hybrid technology, a solid active filter that is set to redefine the standards of sample preparation workflows.

At Porvair Sciences we recognise the importance of time, quality and cleanliness required when working with highly sensitive analytical equipment and applications. The Microlute™ sample preparation is designed to overcome modern day challenges of obtaining reproducible cleanliness by eliminating common variabilities inherent with current methodologies.

From simple sample clean-up to selective preparation methods, explore the range of Microlute™ products guaranteed to give you the cleanest results with the highest level of reproducibility available.

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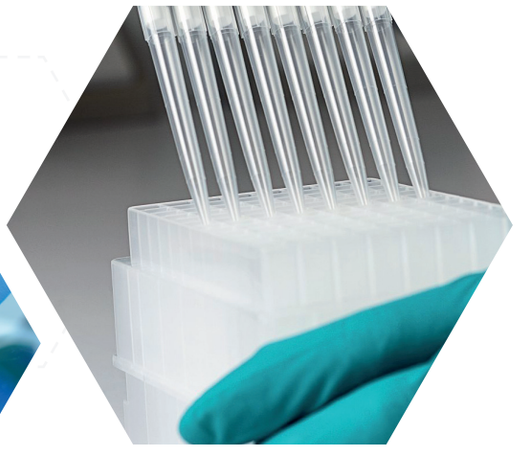
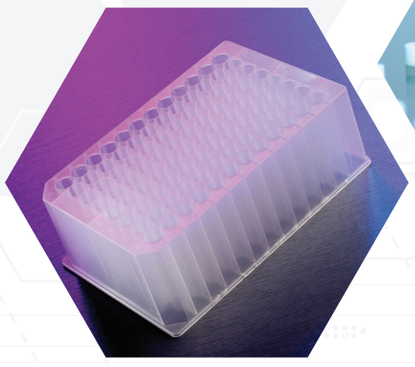
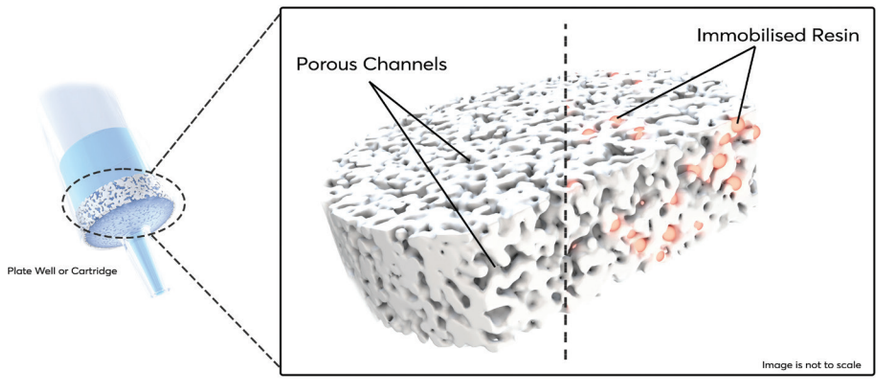




Microlute™ Hybrid Technology

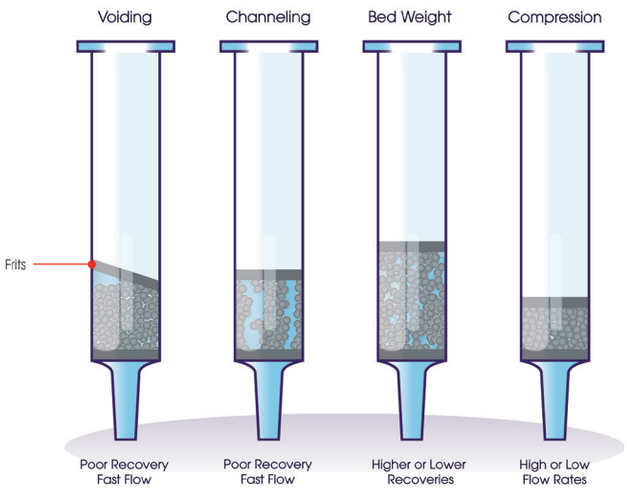
Porvair Sciences expertise in porous plastics manufacturing has led to the development a unique composite filter, a porous plastic structure containing chromatographic active media immobilised within evenly distributed pores. This hybrid technology is designed to offer greater control over flow rates throughout sample preparation methods. Consistent flow of liquids through the active media maximises removal of contaminants and recovery of analytes with greater reproducibility. The Microlute™ hybrid technology enhances the sensitivity and integrity of analytical methods and provides confidence in results each and every time.



Traditional loose-filled methods for chromatography applications is often associated with poor and inconsistent flow rates. This is largely due to the inherent problems with packing of loose particles (over-compression, under-compression and voiding) in wells and columns. Packing inconsistencies can impact not only the effectiveness of sample preparation, but the reproducibility and reliability of results obtained.

Replacing loose particles with a single hybrid structure is a key step towards improving performance of sample preparation methods. The interconnected network of evenly distributed pores allows biological fluids to flow smoothly and consistently through the filter. For methods such as solid phase extraction (SPE), this open structure enhances interactions between the active solid phase and samples for maximum removal or retention of analytes for recovery.

The robust structure of Microlute™ products enables greater control and consistency of assembly during manufacture and increases reliability and reproducibility of results in laboratories without the need to re-analyse or duplicate.



Microlute™ products also eliminates the need of ‘extra’ flanking filters or frits for media support allowing further undisrupted flow of samples with reduced material breakthrough. Hydrophobic treatment of filters offers greater sample holdup for methods that require subsequent pull through for elution of cleaner extracts.

Advantages include:

- **No liquid channelling**
- **Less resin required**
- **Smaller sample size**
- **Reduced drying time**
- **Less chemicals**

Microlute™ PLR

Phospholipids are a ubiquitous class of amphiphilic molecules found in all living organisms as a major component of cell membranes. Although essential to cells, removal of phospholipids from biological samples is a fundamental sample preparation step to eliminate a major source of ion suppression and obtain true analyte signals for analysis.

Utilising the strengths of the hybrid technology, Microlute™ PLR effectively removes all classes of phospholipids and maximises analyte recovery with market-leading reproducibility.

Greater Reproducibility

Less than 4% RSD for reliable phospholipid removal and analyte recovery first time and every time.

Effective Removal

Precise removal of > 99% of all classes of phospholipids from plasma and serum samples.

Maximum Recovery

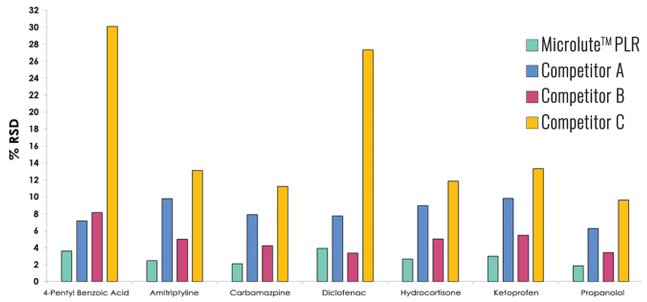
Greater than 90% recovery with high levels of reproducibility for a wide range of acidic, basic or neutral analytes.

Higher Sensitivity

Uncover true analyte responses by minimising suppression of analytes

Market Leading Reproducibility

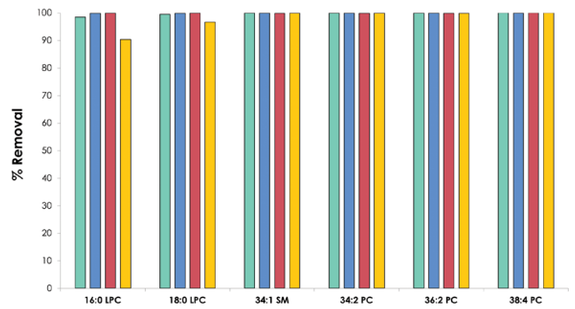
< 4 % RSD for Higher Confidence in Results



Consistent phospholipid analyte recovery from samples, from well-to-well and batch-to-batch first time and every time. High-throughput studies will benefit from a reproducible, high performing sample preparation workflow.

Effective Phospholipid Removal

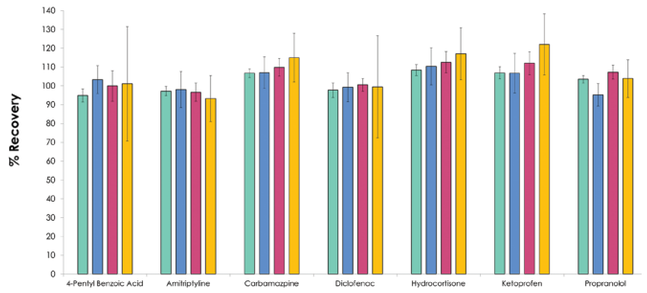
> 99% Removal of all classes of phosopholipids



Consistent flow rates of biological fluids through the filter results in greater interactions with the active media throughout the 96-well plate, allowing precise and specific removal of all classes of phospholipids (LPC, PC, SM).

High Analyte Recovery

> 90% Recovery for Acidic, Basic & Neutral Analytes



The Microlute™ hybrid technology is designed to capture phospholipids and allow small molecules (analytes) to smoothly pass through unaffected. Get greater than 90% recovery with high levels of reproducibility for a wide range of acidic or neutral analytes.

Ordering Information

Product Number	Description	Format	Pack Qty
PPLR0251-100	Microlute™ PLR 25 mg	1 ml Cartridge	1
PPLR025P-001	Microlute™ PLR 25 mg	96 Well Plate	1

Microlute™ CP

Microlute™ CP takes SPE to a new level of performance by enhancing the reproducibility of analyte extraction and recovery from biological, environmental and chemical samples.

Unlike traditional loose-filled SPE methods, Microlute™ CP uses a hybrid structure, a solid interconnected network of evenly distributed pores combined with the retentive media. This design enhances the flow-through of samples to maximise interactions between analytes and the solid phase to deliver a reproducible SPE method that excels in performance, cleanliness and sensitivity.

Phases: Reversed Phase (RP), Strong Cation Exchange (SCX), Strong Anion Exchange (SAX), Weak Cation Exchange (WCX), Weak Anion Exchange (WAX)

Formats: 96 well microplates and 3 mL cartridges

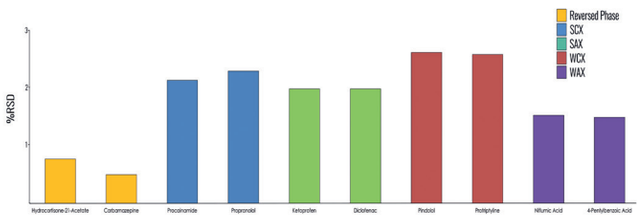
Bed Weight: 30 mg/well or cartridge

Analysis: UHPLC, HPLC, GC, LCMS, GCMS

Applications: Drugs of abuse detection, metabolite analysis, food analysis

Market Leading Reproducibility

<4% RSD for greater confidence in results



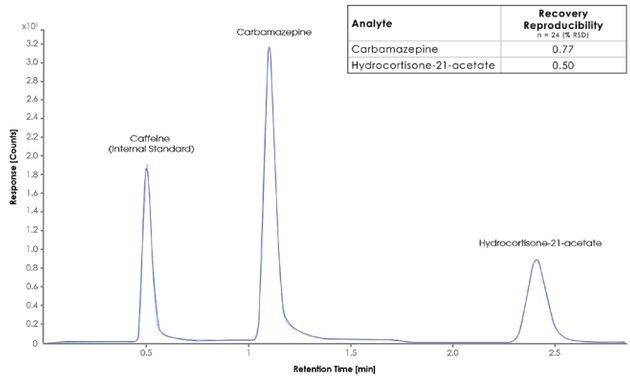
Consistent analyte recovery from samples, from well-to-well and batch-to-batch first time and every time. High-throughput studies will benefit from a reproducible, high performing sample preparation workflow.

Enhanced reproducibility

The goal of any SPE or sample preparation method development is to get sufficient analyte recovery and removal of contaminating compounds that may cause interference or reduce sensitivity. Reproducibility of the method is however a more important consideration. Sample to sample, day to day, month to month, a reproducible method will provide enhanced confidence in results and lower the need for duplication. Microlute™ CP has technology has a leading design that reduces the variability seen in standard SPE product ranges and guarantees the highest level of sample reproducibility available.

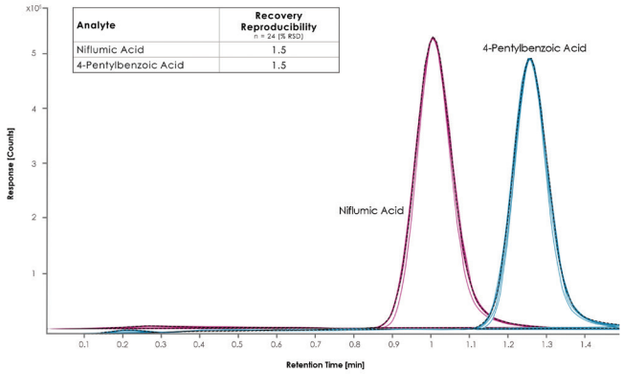
Reproducibility of Recovering Analytes using Microlute™ CP RP

Analyte	Recovery Reproducibility n = 24 (% RSD)
Carbamazepine	0.77
Hydrocortisone-21-acetate	0.50



Reproducibility of Recovering Compounds using Microlute™ CP WAX

Analyte	Recovery Reproducibility n = 24 (% RSD)
Niflumic Acid	1.5
4-Pentylbenzoic Acid	1.5



Microlute™ CP RP - Reversed Phase for SPE

Microlute™ CP reversed phase (RP) plates and cartridges contain immobilised polymeric DVB (divinyl-benzene) within its structure for retention of neutral and non-ionisable compounds. The stationary phase allows analytes to be retained via hydrophobic interactions and polar contaminants are simply removed by washing with a polar solvent such as water. Depending on the desired analysis, retained analytes can be gradually eluted off in fractions with increasingly non-polar solvents or flushed all together from the phase with a strong organic wash. Microlute™ is an ideal starting point for many applications or where there is a wide range of compounds present.

Samples Matrix: biological fluids, environmental extracts, pharmaceutical preparations

Analytes: Hydrophobic & polar compounds

Elution: Methanol, acetonitrile

Formats: 96 well plates and cartridges

Bed Weight: 30 mg/well or cartridge

Applications: Pharmaceutical, food, environmental, forensic toxicology

Microlute™ CP Reversed Phase Method at a Glance

Sample Pre-treatment | pH adjust your sample to be ionised (for positive and negatively charged analytes)

- Perform protein precipitation if biological and too viscous
- Perform filtration if samples may cause blockages in the plate or cartridge

Conditioning: To ensure the hybrid polymer efficiently captures analytes.

This is achieved upon addition of methanol for all Microlute™ CP methods.

Equilibration: Required for maximum retention on analytes in hybrid polymer

Water is used to activate this step when using the reversed phase.

Load: Samples are added to composite material in plate wells or cartridges

Wash: Removes any interfering compounds and leaves analytes of interest bound to the solid phase (composite) for elution. Microlute™ CP RP, typically water or a weak methanol/acetonitrile solution is used for this step. There is no strong ion exchange sorbent to retain analyte(s) with this phase.

Elution: A reversed phase solvent (typically methanol or acetonitrile) or solvent mixture is used to elute analyte(s) of interest.

This step allows analyte to be washed off the solid phase to be efficiently and completely recovered.

Ordering Information

Product Number	Description	Format	Pack Qty
PRP030P-001	Microlute™ CP RP, 30 mg	96 well plate	1
PPRP0303-050	Microlute™ CP RP, 30 mg	3 ml cartridge	50

Strong and Weak Ion Exchange

Ion exchange cartridges and plates retain, and separate analytes based on their charge or its ionisation behaviour with respect to pH or ionic buffer strength. The Microlute CP ion exchange range covers both anion and cation in both weak and strong forms to cover the full range of sample and analyte types. All forms use the innovative Microlute CP hybrid technology to offer the highest available reproducibility levels available, without compromising the chromatography.

Sample matrix: Low ionic strength aqueous sample matrix

Cationic exchange: Positively charged with ionisable analytes

Anion exchange: Negatively charged with ionisable analytes

Elution: pH adjustment and ionic strength buffers *

Typical applications: Pharmaceutical, food, environmental, forensic toxicology

Strong Cation Exchange (SCX)

Microlute™ CP SCX uses a sulphonic acid functional group on a polymeric base with a pKa of <1. This provides a wide pH range for cationic exchange with basic compounds and retention of neutral compounds through the base polymer.

* not ideal for sensitive methods eg. MS

Strong Anion Exchange (SAX)

The Microlute™ CP SAX uses a quaternary ammonium chemistry on a polymeric base with a pKA >18. Ideal for the capture of acidic analytes through anion exchange. As with the SCX, the polymer base offers a secondary retention of neutral compounds.

Weak Cation Exchange (WCX)

Microlute™ CP WCX is used to retain strongly basic compounds that have pKa's that keep them ionised. The Microlute™ CP WCX uses a carboxylic acid ligand with a pKa of ~4.5.

Weak Anion exchange (WAX)

Microlute™ CP WAX uses a tertiary amine ligand on the polymer base with a pKa of ~8.5. This is ideal for the retention of strong acidic compounds unable to be neutralised through pH changes.

Microlute™ CP Chemistries

	Microlute™ CP				
	RP	**SCX**	**SAX**	**WCX**	**WAX**
Retention Mechanism	Reverse Phase	1st Cation Exchange 2nd Hydrophobic Interaction	1st Anion Exchange 2nd Hydrophobic Interaction	1st Cation Exchange 2nd Hydrophobic Interaction	1st Anion Exchange 2nd Hydrophobic Interaction
Analyte Retention	Nuetral compounds with some polars	Basic analytes with neutrals	Acidic analytes with neutrals	Strong basic analytes with neutrals	Strong acidic analytes with neutrals
Base	Hybrid Polymer	Hybrid Polymer	Hybrid Polymer	Hybrid Polymer	Hybrid Polymer
Ligand	–	Sulphuric Acid	Quaternary Ammonium	Carboxylic Acid	Tertiary Amine
pKa	–	<1	>18	~4.5	~8.5

Ordering Information

Product Number	Description	Format	Pack Qty
PSCX030P-001	Microlute™ CP SCX, 30 mg	96 well plate	1
PSAX030P-001	Microlute™ CP SAX, 30 mg	96 well plate	1
PWCX030P-001	Microlute™ CP WCX, 30 mg	96 well plate	1
PWAX030P-001	Microlute™ CP WAX, 30 mg	96 well plate	1
PSCX0303-050	Microlute™ CP SCX, 30 mg	3 ml cartridge	50
PSAX0303-050	Microlute™ CP SAX, 30 mg	3 ml cartridge	50
PWCX0303-050	Microlute™ CP WCX, 30 mg	3 ml cartridge	50
PWAX0303-050	Microlute™ CP WAX, 30 mg	3 ml cartridge	50

Microlute™ SLE

Easily extract a wide range of acidic, basic and neutral analytes from a range of biological or aqueous samples with a superior method of liquid extraction, supported liquid extraction (SLE). Microlute™ SLE 96 well plates and cartridges use selectively sourced diatomaceous earth (DE) as the solid support to maximise absorption of the aqueous solutions to allow simpler recovery of analytes from samples with greater reproducibility.

Analysis: UHPLC, HPLC, GC, LCMS, GCMS

Applications: Forensics, pharmaceutical, drug discovery and clinical

Formats: 96 well plates and cartridges

Weight: Max Load Volume
200 mg : 200 µl
400 mg : 400 µl

Samples: Plasma, serum, oral fluids, urine or other aqueous based solutions

Compatible Accessories: Vacuum and positive pressure systems

Effortless Recovery

Recovery of contaminant-free analytes without the risk of repetitive strain injuries. Less manual handling steps for cleaner, easier and quicker sample clean-up.

Higher Throughput

Simultaneously and reproducibly process up to 96 samples. Perfect for laboratory automated workflows.

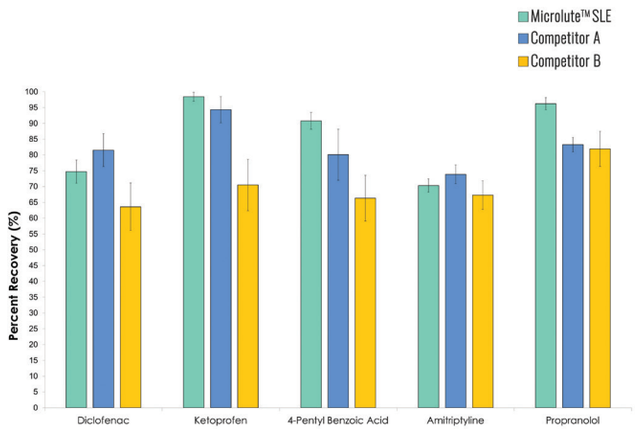
Cleaner Samples

Effective and efficient removal of proteins and impurities. Less risk of contamination.

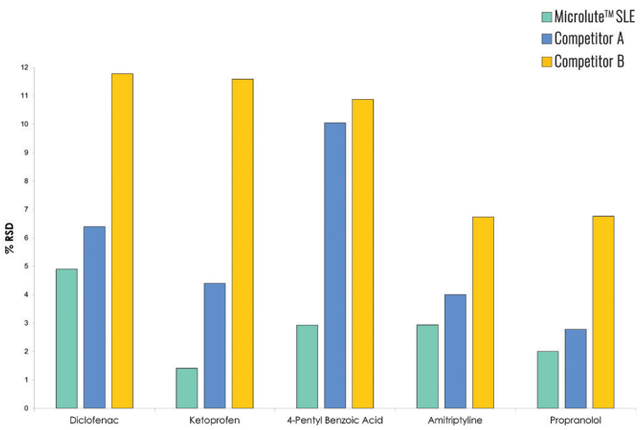
Lab Friendly

Significantly less solvent and glassware use and reduced clean-up time compared to liquid-liquid extraction.

High Recovery



High Reproducibility



Ordering Information

Product Number	Description	Format	Pack Qty
PSLE2003-050	Microlute™ SLE 200 mg	3ml Cartridge	1
PSLE200P-001	Microlute™ SLE 200 mg	96 well plate	1
PSLE4003-050	Microlute™ SLE 400 mg	3ml Cartridge	1
PSLE400P-001	Microlute™ SLE 400 mg	96 well plate	1

Microlute™ PPP

The Microlute™ Protein Precipitation Plate (PPP) is designed to efficiently precipitate proteins from plasma and serum. Using the crash method, proteins are precipitated or 'crashed' out with acetonitrile and filtered. The 96 well plate efficiently handles processing up to 96 samples at once and ensure minimal protein contamination during injection into chromatographic systems.

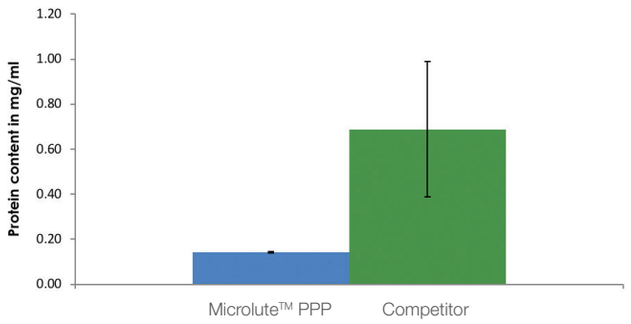
Analysis: UHPLC, HPLC, GC, LCMS, GCMS

Formats: 96 well plates

The Microlute™ PPP plate uses a novel dual filter to efficiently removal proteins without leakage of samples. The super hydrophobic filter prevents samples from leaking through until fully denatured while the depth filter allows complete precipitation without any blockages when positive pressure or vacuum is applied.

This simple yet effective method for protein precipitation is easily automatable for high-throughput protein removal.

Protein content of filtrates from protein precipitation plates



Protein content of filtrates from Microlute™ Protein Precipitation Plate measured using BIORAD DCTM Protein Assay.

Ordering Information

Product Number	Description	Format	Pack Qty
240010	Microlute™ PPP	96 Well Plate	1
240200	Microlute™ PPP	96 Well Plate	5

Filter Plates

Filtration plates are used in their simplest form to remove particulate matter from liquid. Either the particulate matter or the filtrate is needed for further study. Porvair Sciences has a range of filter plates to suit most filtration applications.

We have optimised filter plates for applications including cell harvesting, liquid chromatography DNA separations, binding studies, plasmid isolation, general filtration and sample clean-up. Porvair has a full range of 48-, 96- and 384-well microplates with a choice of glass fibre, nylon, PVDF or polyethylene filtration materials and well volumes ranging from 350 µl to 7.5 ml.

Product Number	Description	Format	Pack Qty
360120	Polyethersulfonate (PES), 400 µL, 0.2 µm porosity Long drip directors, Low protein binding.	96 well plate	25
360059	Polyethersulfonate (PES), 2,000 µL, 0.45 µm porosity Long drip directors, Low protein binding.	96 well plate	25
360074	Polyvinylidene difluoride (PVDF), 800 µL, 0.2 µm porosity Long drip directors, Low protein binding.	96 well plate	25
360058	Polypropylene (PP), 800 µL, 0.45 µm porosity, Long drip directors.	96 well plate	25

Other sizes, membranes and porosities are available on request.

Vacuum Manifolds

Vacuum manifolds are used to draw liquid through a filter or SPE plate into either a waste tray or a collection plate. The application of vacuum increases the speed at which samples can be collected.

Microlute™ manifold

The Microlute™ vacuum manifold from Porvair Sciences is precision machined from crystal clear acrylic (top plate) and acetal polymer (plenum chamber). The acrylic top plate allows visual access to the plenum chamber for checking progress of the separation process.

- Designed to take most filter plates manufactured to the SBS/ANSI specification with long drip directors
- Also designed so that SPE plates can be used, especially the Porvair Sciences Microlute™ CP plate
- Fitted with valve controller to ensure accurate adjustments of vacuum to the manifold
- On/off valve for speed of use
- Square well collection plate volumes of 350 µl, 1 ml and 2 ml may be used. Any plate up to 44 mm in height can be used
- Fitted with a custom O-ring in upper surface allowing airtight interface between plates during operation
- Removable top plate to install reservoir tray or collection plate
- Chamber has a medium resistance to alcohols and weak acids

Universal robotic manifold

Based on our successful Microlute™ Acrylic Manifold, the Universal Robotic Manifold is designed to be easily assembled and disassembled by robotic manipulators, thus enabling productive automation of SPE or DNA clean-up procedures. Able to accommodate collection plates from 14 mm - 44 mm in height and adaptable for working with short, medium and long skirts and drip directors, the Universal Robotic Manifold can operate with many different brands of filter plate and collection trays. Supplied with an integral vacuum gauge, the Manifold provides complete control of vacuum pressure ensuring plates are processed with high reproducibility. The Manifold is fully compatible with most commercial robotic liquid handling systems.

The Universal Robotic Manifold is suitable for a range of manufacturer's plates without an adaptor. For certain plate types a Shallow Adaptor or a Deep Adaptor, is required.

- Compatible with any filter plate type
- Robotic friendly designs aids automation
- Chemically resistant acetal/acrylic construction
- Adaptable for different collection plates
- Easy visual inspection of process
- Built in vacuum gauge for reproducibility

Product Number	Description	Pack Qty
228008	Microlute™ Robotic Compatible Universal Vacuum Manifold, Acrylic, c/w gauge	1
228020	Robotic Compatible Universal Vacuum Manifold, Acrylic, c/w gauge	1

Glass Chromatography Vials and Closures

Glass vials are essential to any chromatography workflow. We offer a wide range of vials, seals, inserts and caps to suit routine and high throughput sample analyses. Designed and manufactured by JG Finneran, all vials are compatible with robotic arm autosamplers.

R.A.M™ Vials

R.A.M. vials are designed specifically to work with robotic arm autosamplers that have a crimp style height with the convenience of a screw thread configuration. Choose from clear or amber Type I borosilicate glass. 12 x 32 mm 9 mm threads, borosilicate glass.

Product Number	Description
32009-1232	2.0 mL Clear R.A.M.™ Vial, 12 x 32 mm, 9 mm Thread
32009-1232A	2.0 mL Amber R.A.M.™ Vial, 12 x 32 mm, 9 mm Thread
32009E-1232	2.0 mL Clear R.A.M.™ Vial, 12 x 32 mm, with White Graduated Spot, 9 mm Thread
32009E-1232A	2.0 mL Amber R.A.M.™ Vial, 12 x 32 mm, with White Graduated Spot, 9 mm Thread

Snap Seal™ Vials

Snap Seal™ Vials can be securely sealed with the patented Poly Crimp™ Seal, an aluminum crimp seal or a variety of Snap Top Cap™ designs. More glass in the neck area minimizes breakage of the neck during decapping. Vial incorporates the unique StepVial design that precisely centers a limited volume insert in the vial neck, assuring dependable, reliable use with autosamplers. 12 x 32 mm with 11 mm crimp (Patented)

Product Number	Description
31811-1232	2.0 mL Clear Snap Seal™ Vial, 12 x 32 mm, 11mm Crimp [Patented]
31811-1232A	2.0 mL Amber Snap Seal™ Vial, 12 x 32 mm, 11mm Crimp [Patented]
31811E-1232	2.0 mL Clear Snap Seal™ Vial, 12 x 32mm, with White Graduated Spot, 11 mm Crimp [Patented]
31811E-1232A	2.0 mL Amber Snap Seal™ Vial, 12 x 32mm, with White Graduated Spot, 11 mm Crimp [Patented]

Big Mouth Vials

40% larger opening prevents broken needles due to increased target area. Neck finish allows use of patented Poly Crimp™ Seals or standard aluminium seals. 12 x 32 mm with 11 mm crimp.

Product Number	Description
32011L-1232	2.0 mL LO (Large Opening) Clear Vial, 12 x 32 mm, 11 mm Crimp
32011L-1232A	2.0 mL LO (Large Opening) Amber Vial, 12 x 32mm, 11 mm Crimp
32011LE-1232	2.0 mL LO (Large Opening) Clear Vial, 12 x 32 mm, with White Graduated Spot, 11 mm Crimp
3211LE-1232A	2.0 mL LO (Large Opening) Amber Vial, 12 x 32 mm, with White Graduated Spot, 11 mm Crimp

Rack

Keep your vials organised, stacked and easily stored away with our standard polypropylene racks for 12mm vials and tubes. These racks are compatible 12 x 32 mm vials.

Product Number	Description
9750-12B	50 Position Blue Polypropylene Stackable Rack for 12 mm Vials and Tubes, Autoclavable
9750-12BL	50 Position Black Polypropylene Stackable Rack for 12 mm Vials and Tubes, Autoclavable
9750-12PK	50 Position Pink Polypropylene Stackable Rack for 12 mm Vials and Tubes, Autoclavable
9750-12W	50 Position White Polypropylene Stackable Rack for 12 mm Vials and Tubes, Autoclavable

Big Mouth Inserts

ig mouth limited volume inserts are designed for use with Big Mouth vials and are available preassembled with a polymer bottom shock absorber spring. The conical design permits complete sample removal. The Step Insert precisely sits in the neck of the vial, eliminating the need for metal or plastic springs.

Product Number	Description
4005BS-625	50 µL Glass Big Mouth Conical Limited Volume Insert, 6 x 25 mm, Precision-Formed Mandrel Interior, w/ Bottom Spring
4025BS-629	250 µL Glass Big Mouth Conical Limited Volume Insert, 6 x 29 mm, Precision-Formed Mandrel Interior, w/ Bottom Spring
4025BSFT-629	250 µL Glass Big Mouth Conical Limited Volume Insert, 6 x 29 mm, Pulled Point Interior, w/ Bottom Spring
425BSFT-629Z	Silanized – 250 µL Glass Big Mouth Conical Limited Volume Insert, 6 x 29 mm, Pulled Point Interior, w/ Bottom Spring
4025FT-631	250 µL Glass Big Mouth Conical Limited Volume Insert, 6x31 mm, Pulled Point Interior, No Spring
4025PBS-631	250 µL Polypropylene Big Mouth Conical Limited Volume Insert, 6 x 31 mm, Precision-Formed Interior, w/ Bottom Spring
4035-630	350 µL Glass Flat Bottom Insert, 6 x 30 mm

Cap Closures

Caps may be snapped on and off by hand which eliminates the need for metal crimping and decapping tools, thus reducing potential hazards due to sharp aluminium metal edges. Large opening top provides greater target area for needle penetration.

Product Number	Description
5240-11	11 mm Clear Snap Cap, PTFE/Butyl Rubber Lined
5250-11	11 mm Clear Snap Cap, PTFE/Silicone Lined
5260-11	11 mm Clear Snap Cap, PTFE/Silicone/PTFE Lined
5270-1	11 mm Clear Snap Cap, PTFE/Silicone with Slit Lined
5140-11	11 mm Silver Aluminum Seal, Clear PTFE/Red Rubber Lined
5150-11	11 mm Silver Aluminum Seal, PTFE/Silicone Lined
5160-11	11 mm Silver Aluminum Seal, PTFE/Silicone/PTFE Lined
5170-11	11 mm Silver Aluminum Seal, PTFE/Silicone with Slit

11 mm Clear Snap Caps are compatible with Snap Seal Vials (#31811-1232).
11mm Silver Aluminium seals are compatible with Snap Seal Vials

5394-09FRB	9 mm R.A.M.™ Ribbed Cap, Royal Blue, PTFE/Butyl Rubber Lined
5395-09FRB	9 mm R.A.M.™ Ribbed Cap, Royal Blue, PTFE/Silicone Lined
5396-09FRB	9 mm R.A.M.™ Ribbed Cap, Royal Blue, PTFE/Silicone/PTFE Lined
5397-09FRB	9 mm R.A.M.™ Ribbed Cap, Royal Blue, PTFE/Silicone with Slit Lined

Compatible with 32009-1232 vials

Ordering Information

Microlute™ CP

Product Number	Description	Format	Pack Qty
PRP030P-001	Microlute™ CP RP, 30 mg	96 Well Plate	1
PSCX030P-001	Microlute™ CP SCX, 30 mg	96 Well Plate	1
PSAX030P-001	Microlute™ CP SAX, 30 mg	96 Well Plate	1
PWCX030P-001	Microlute™ CP WCX, 30 mg	96 Well Plate	1
PWAX030P-001	Microlute™ CP WAX, 30 mg	96 Well Plate	1
PPRP0303-050	Microlute™ CP RP, 30 mg	3 ml cartridge	50
PSCX0303-050	Microlute™ CP SCX, 30 mg	3 ml cartridge	50
PSAX0303-050	Microlute™ CP SAX, 30 mg	3 ml cartridge	50
PWCX0303-050	Microlute™ CP WCX, 30 mg	3 ml cartridge	50
PWAX0303-050	Microlute™ CP WAX, 30 mg	3 ml cartridge	50

Microlute™ PLR

PPLR0251-100	Microlute™ PLR 25mg	1 ml Cartridge	1
PPLR025P-001	Microlute™ PLR 25mg	96 Well Plate	1

Microlute™ SLE

PSLE2003-050	Microlute™ SLE 200 mg	3 ml Cartridge	1
PSLE200P-001	Microlute™ SLE 200 mg	96 Well Plate	1
PSLE4003-050	Microlute™ SLE 400 mg	3 ml Cartridge	1
PSLE400P-001	Microlute™ SLE 400 mg	96 Well Plate	1

Microlute™ PPP

240010	Microlute™ PPP	96 Well Plate	1
240200	Microlute™ PPP	96 Well Plate	Pack of 5

Filter Plates

360120	Polyethersulfonate (PES), 400 µL, 0.2 µm porosity Long drip directors, Low protein binding.	96 well plate	25
360059	Polyethersulfonate (PES), 2,000 µL, 0.45 µm porosity Long drip directors, Low protein binding.	96 well plate	25
360074	Polyvinylidene difluoride (PVDF), 800 µL, 0.2 µm porosity Long drip directors, Low protein binding.	96 well plate	25
360058	Polypropylene (PP), 800 µL, 0.45 µm porosity, Long drip directors.	96 well plate	25

Manifolds

228008	Microlute™ Robotic Compatible Universal Vacuum Manifold, Acrylic, c/w gauge	1
228020	Robotic Compatible Universal Vacuum Manifold, Acrylic, c/w gauge	1

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