



Multiwell Plates

Application Specific Plates	90-101
UNIFILTER Filtration Microplates	102-109
Collection Plates	109-112
Specialty Microplates	112-115
Multiwell Accessories	116-121

Multiwell Plates:

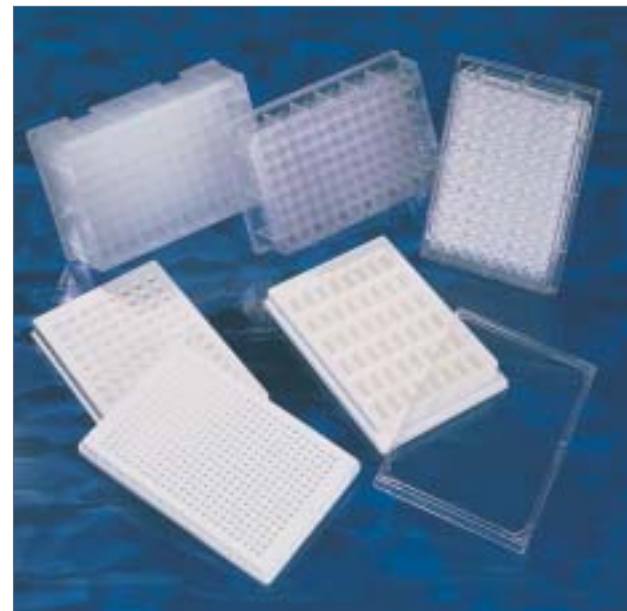
Their novel design allows for numerous applications, such as sample preparation, drug discovery, genomics and filter based assays and SPE.

Multiwell Plates

Whatman is dedicated to providing the most advanced technology for sample preparation to meet the growing demands of the life sciences market. Whatman filters are used worldwide for research, analysis and quality control in the pharmaceutical and biotechnology industries. These high-quality filters are provided in a range of multiwell analytical plates for pharmaceutical and life science research.

Whatman utilizes a unique patented process to encapsulate the filter media, which ensures no cross talk or contamination between wells. This patented technology allows for use of a variety of Whatman filter media. In addition, to further optimize the filter plates for specific applications, novel polymers, surface treatments, well densities, profiles and accessories are incorporated into the process. Our microplate technology is applied by a team of engineers, scientists, polymer engineers and filtration experts to ensure Whatman is at the leading edge of new developments.

The Whatman multiwell range of products is extremely diverse. The novel design of the filter plates allows for a large number of applications. Applications for disciplines such as sample preparation, genomics and filter based assays are served by the multiwell approach to filtration technology. Some core applications include sample cleanup, cell-based immunoassay, isolation of nucleic acids and compound library generation using parallel synthesis procedures.



Whatman Multiwell Plates

Application Specific Plates

Whatman has developed consistent and reproducible microplates and microplate systems to improve throughput and reduce cost for a number of biological sample preparations and cleanup procedures.

Comprehensive protocols are provided to enable implementation by all types of users. Whatman microplates conform to the proposed ANSI/SBS standards and are engineered for fast and convenient processing applications.



UNIFILTER Plate

384 Well DNA Binding UNIFILTER®

The 384 Well DNA Binding UNIFILTER plate effectively binds and purifies DNA molecules. It provides highly reproducible results with yields exceeding 2 µg/well, from bind-wash-elute processing with collection by filtration. Minimal liquid hang up allows for reduced elution volume, enabling DNA concentration as high as 150 ng/µL. Further ethanol precipitation is unnecessary. The DNA is ready to use.



384 Well DNA Binding UNIFILTER

Features and Benefits

- High efficiency bind-wash-elute processing with collection by filtration
- Simplifies automation with no cross contamination
- Highly reproducible results yielding DNA purity exceeding 2 µg per well, sufficient for sensitive downstream applications
- Minimal liquid hang up allows for reduced elution volume with DNA concentration as high as 150 ng/µL

Ordering Information - 384 Well DNA Binding UNIFILTER

Catalog Number	Well Format	Well Volume (µL)	Plate Material	Filter Media	Quantity/Case
7700-2110	384	100	Clear Polystyrene	DNA Binding	50
7701-1100*	384	100	Clear Polystyrene	N/A	50

* Collection plate

Dye Terminator Removal UNIFILTER® 96 Well and 384 Well

The Whatman Dye Terminator Removal plates are available in 96 Well and 384 Well formats. These plates can be used with gel filtration media for high-throughput sequencing reaction cleanup, including removal of dye blobs.

They are constructed from rigid polystyrene that can withstand centrifugation. Laboratory packing of gel filtration media is less expensive than pre-packed plates or spin columns.

Protocol provides long and readable fragments, eliminating the common 'dye blob' problem. The protocol is optimized for Applied Biosystems BigDye® Terminator chemistry.



96 Well Dye Terminator Removal UNIFILTER

Ordering Information - 96 Well Dye Terminator Removal UNIFILTER

Catalog Number	Well Format	Well Volume (µL)	Plate Material	Well Bottom	Quantity/Case
7700-2801	96	800	Polystyrene	Filter, LDD*	25
7701-5750**	96	750	Natural Polypropylene	Round	25

* Long drip director

** Collection plate

Ordering Information - 384 Well Dye Terminator Removal UNIFILTER

Catalog Number	Well Format	Well Volume (µL)	Plate Material	Well Bottom	Quantity/Case
7700-1101	384	100	Polystyrene	Filter, LDD*	50
7701-1100**	384	100	Polystyrene	Flat	50

* Long drip director

** Collection plate

ELISA UNIFILTER®

Traditional ELISA is performed in plastic microplates. Whatman offers speed, sensitivity, and simple washing protocols with nitrocellulose filter plates.

ELISA performed with the Whatman ELISA UNIFILTER takes less time than traditional methods using regular microplates. Coating the nitrocellulose filter with antibody takes only minutes, compared with overnight procedures employed for coating polystyrene microplates. Also, the use of vacuum filtration greatly reduces the time required and enables quantitative collection of filtrate into a collection plate.



ELISA UNIFILTER

Ordering Information - ELISA UNIFILTER

Catalog Number	Well Format	Well Volume	Plate Material	Filter Media	Well Bottom	Quantity/Case
7700-3307	96	350 µL	White Polystyrene	0.45µm CN**	Filter	50
7701-1350*	96	300 µL	Clear Polystyrene	N/A	Flat	50
7701-5200*	96	2 mL	Natural Polypropylene	N/A	Round	25
7705-0107	UniVac™ Vacuum to Collect Manifold, acrylic					1
7704-0001	Clear Polyester Thin Cold Sealing Film Adhesive Backing					100

* Collection plate

** CN = cellulose nitrate

High-Throughput Genomics UNIFILTER®

With ever increasing demand for simple, fast methods to purify DNA from bacterial cultures, the Whatman Genomics microplate is the ideal solution for the clarification of lysates containing large insert vectors.

This microplate has a cellulose acetate membrane with a special support, which clears non-chaotropic bacterial lysates, and long drip directors to eliminate cross talk between wells. Without further purification the DNA is clean enough for further enzymatic manipulation. Cellulose acetate acts as both a depth filter and a fine particle filter. The 0.45 µm pores do not block because of the depth effect of the membrane. Cellulose acetate is also inert and does not bind either DNA or protein.



High-Throughput Genomics UNIFILTER

Ordering Information - High-Throughput Genomics UNIFILTER

Catalog Number	Well Format	Well Volume	Plate Material	Filter Media	Well Bottom	Quantity/Case
7700-2808	96	800 µL	Clear Polystyrene	0.45 µm CA**	N/A	25
7701-5205*	96	2 mL	Natural Polypropylene	N/A	Round	25
7701-5200*	96	2 mL	Natural Polypropylene	N/A	Round	25
7701-5750*	96	750 µL	Natural Polypropylene	N/A	Round	25

* Collection plate

** CA = cellulose acetate

PCR Cleanup™ UNIFILTER®

Process 96 or 384 samples quickly by a bind-wash-elute method with greater than 85% recovery. The PCR Cleanup UNIFILTER eliminates time-consuming precipitations and labor-intensive resin purifications. Purified DNA is ready for sequencing, hybridization assays and microarrays.

The PCR Cleanup UNIFILTER can be used with both vacuum and centrifuge techniques. (Centrifugation is recommended for final elution with the 384 Well UNIFILTER).



96 Well PCR Cleanup UNIFILTER

Ordering Information - PCR Cleanup UNIFILTER

Catalog Number	Well Format	Well Volume (µL)	Plate Material	Filter Media	Quantity/Case
7700-2810	96	800	Clear Polystyrene	DNA Binding	25
7701-5250*	96	250	Natural Polypropylene	N/A	50
7700-2110	384	100	Clear Polystyrene	DNA Binding	50
7701-1100**	384	100	Clear Polystyrene	N/A	50

* Does not comply with SBS standards

** Collection plate

Phase Separation UNIFILTER®

The Phase Separation Plate allows for a quick separation of halogenated solvents from an aqueous phase, with no carryover and no close manual contact. The plate consists of a 2 mL, 96 Well, rigid glass-filled polypropylene body. It has long drip directors to ensure accurate dispensing of the filtrate. Whatman 1PS media is sealed into each well.

Whatman 1PS is a silicone-treated medium which remains impervious to aqueous solvents but allows the unimpeded passage of organic solvents. Providing that the solvent layer is in contact with the 1PS, the organic solvent layer will drain under gravity until the aqueous interface is reached, when flow will stop automatically. If subsequent harvesting of the aqueous layer is required, a vacuum can then be applied to collect this layer.



Phase Separation UNIFILTER

Ordering Information - Phase Separation UNIFILTER

Catalog Number	Well Format	Well Volume	Plate Material	Well Bottom	Quantity/Case
7720-7229-01	96	2 mL	Glass Filled Polypropylene	Phase Separation	1
7701-5750*	96	750 µL	Natural Polypropylene	Round Bottom	25
7701-5200*	96	2 mL	Natural Polypropylene	Round Bottom	25

* Collection plate

Protein Kinase Assay UNIFILTER®

The Protein Kinase Assay filter plate incorporates a P-81 filter in each well. P-81 is a cation exchanger that binds peptides but does not bind unincorporated ATP, resulting in low non-specific background noise and high sensitivity in kinase assay.

The filter plate is produced to SBS standards in rigid white polystyrene or Barex to eliminate optical cross talk problems during liquid scintillation counting. The 150 µL UNIFILTER has shallow wells enabling higher detection sensitivity.



Protein Kinase Assay UNIFILTER

Ordering Information - Protein Kinase Assay UNIFILTER

Catalog Number	Well Format	Well Volume (µL)	Plate Material	Filter Media	Well Bottom	Drip Director	Quantity/Case
7700-3312	96	350	White Polystyrene	Whatman P-81	Filter	Short	50
7700-4312	96	350	White Polystyrene	Whatman P-81	Mesh	Mesh	50
7700-0512	96	150	White Barex	Whatman P-81	Mesh	Mesh	50
7705-0101*	96	N/A	Polyurethane	N/A	-	-	1

* Vacuum to waste manifold

Protein Precipitation UNIFILTER® FF

The Protein Precipitation UNIFILTER FF (Fast Flow) is optimized for removing acetonitrile precipitated proteins from plasma or serum samples. Made with 2 mL, 96 Well, rigid glass-filled polypropylene microplates, it is both robust and chemically resistant.

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 a vacuum is applied.

Features and Benefits

- 96 samples purified at the same time
- Purified samples available in less than 10 minutes
- Precipitation and filtration in the same well
- No laborious pipetting and/or centrifugation required and minimal liquid handling
- Dual Whatman filter media
- Ensures no fluid loss during incubation and fast flow during filtration
- Over 98% protein removal
- Sample volumes up to 150 µL for plasma and 200 µL for serum
- SBS compatible
- Robotics friendly



Protein Precipitation UNIFILTER FF

Ordering Information - Protein Precipitation UNIFILTER FF

Catalog Number	Well Format	Well Volume	Plate Material	Well Bottom	Quantity/Case
7720-7235	96	2 mL	Glass Polypropylene	Standard	1
7720-7236	96	2 mL	Glass Polypropylene	Fast Flow	5
7701-5750*	96	750 µL	Natural Polypropylene	Round Bottom	25
7701-5200*	96	2 mL	Natural Polypropylene	Round Bottom	25

* Collection plate

96 Well Bacterial Growth Plate

The high-throughput Bacterial Growth plate can simplify and accelerate the growth of 96 individual 1.5 mL bacterial cultures. It is used for both overnight cultivation and the initial 'spin down' of bacteria. Made of medical grade polypropylene with a clear polystyrene lid, this gamma-irradiated plate eliminates the need to grow multiple, discrete cultures. It also optimizes space and efficiency in the incubator.



96 Well Bacterial Growth Plate

Whatman has demonstrated that culture integrity is not affected by the close proximity of neighbouring cultures and that each culture grows to the same density as it would in individual culture tubes (at 325 rpm and 37°C for 16 hours).

Features and Benefits

- Consistent cell densities across all 96 Wells
- Eliminates cross contamination between wells
- Growth comparable to individual test tubes
- Ability to automate allows for increased productivity

Ordering Information - 96 Well Bacterial Growth Plate

Catalog Number	Well Format	Well Volume (mL)	Plate Material	Irradiated with Lid	Quantity/Case
7701-5205*	96	2	Polypropylene	Yes	25 (individually bagged)

* Collection plate

96 Well DNA Binding UNIFILTER®

Plasmid DNA Binding UNIFILTER works either as a stand-alone or as part of our high-throughput miniprep system.

Plasmid DNA is bound to the filter under chaotropic conditions, washed twice and then vacuumed to dryness on a vacuum manifold. The plasmid DNA is eluted by vacuum in a final volume of 100 µL into a non-binding polypropylene collection plate using water or TE⁻¹ buffer. The DNA is ready to use and further ethanol precipitation is unnecessary. The final concentration is 50-100 ng/µL, depending on the original culture. The OD260/280 ratio is 1.9 and the yields in all 96 Wells 'max out' at 6 µg. Full protocol is available at www.whatman.com

The Plasmid DNA Binding plate can be used with both vacuum and centrifuge techniques, making it a vital and flexible tool in every high-throughput lab.



96 Well DNA Binding UNIFILTER

Features and Benefits

- DNA recovery of 6 µg per well on average
- Consistent yield across all 96 Wells
- Eluted plasmid DNA is free of genomic DNA contamination
- High quality DNA suitable for PCR, restriction digestion and sequencing
- Save time: no desalting or ethanol precipitation
- No kit required, significantly reduces costs

Ordering Information - 96 Well DNA Binding UNIFILTER

Catalog Number	Well Format	Well Volume (µL)	Plate Material	Filter Media	Quantity/Case
7700-2810	96	800	Clear Polystyrene	DNA Binding	25

96 Well Lysate Clarification UNIFILTER®

The Lysate Clarification UNIFILTER can utilize either vacuum or a centrifuge. The vacuum process is significantly easier to automate with consistency across all wells when used with the DNA Binding UNIFILTER; it also has an average DNA recovery rate 10-30% higher than the manual centrifuge method. This method filters out cell debris to obtain plasmid DNA in the aqueous phase.

Whatman filter technology results in high particle retention and fast flow rates while producing a clean lysate. The Lysate Clarification plate is an important tool for high-throughput plasmid DNA purification.

Features and Benefits

- Processes 96 lysates in less than 10 minutes
- Increases DNA recovery by 10-30%
- Consistent yield across all 96 Wells
- User flexibility of using either centrifugation or vacuum
- 96 Well format is easily automated



96 Well Lysate Clarification UNIFILTER

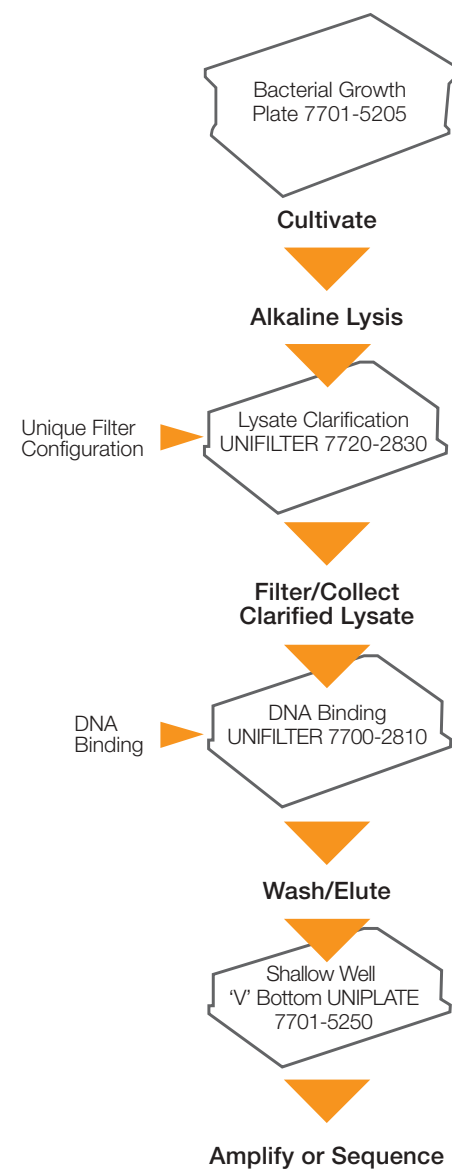
Ordering Information - 96 Well Lysate Clarification UNIFILTER

Catalog Number	Well Format	Well Volume (µL)	Plate Material	Filter Media	Quantity/Case
7720-2830	96	800	Clear Polystyrene	Lysate Clarification	25

Plasmid Miniprep

The preparation of plasmid DNA from bacterial culture is an extremely common procedure. The Plasmid Miniprep System simplifies the process, increases the throughput and improves the purity of plasmid DNA.

The Plasmid Miniprep System consists of a few basic steps, each with an optimized microplate.



Average Yield Per Well	6.0 µg
A260/A280	1.94
EcoR1 Digest	Yes
Sequencing Accuracy (BLAST)	97% over 600 bp

Full protocol available at www.whatman.com

Ordering Information - Plasmid Miniprep

Catalog Number	Description	Well Volume	Plate Material	Well Bottom	Filter Media	Irradiated with Lid	Quantity/Case
7701-5205	96	2 mL	Natural Polypropylene	Round	-	Yes	25
7720-2830	96	800 µL	Clear Polystyrene	Filter, LDD†	Lysate Clarification	No	25
7700-2810	96	800 µL	Clear Polystyrene	Filter, LDD†	DNA Binding	No	25
7701-5200*	96	2 mL	Natural Polypropylene	Round	-	No	25
7701-5750*	96	750 µL	Natural Polypropylene	Round	-	No	25
7701-5250**	96*	250 µL	Natural Polypropylene	'V'	-	No	50
7705-0102	UniVac 3 vacuum/collect manifold						1

* Collection plate

** Does not comply with SBS standards

† LDD = Long drip director

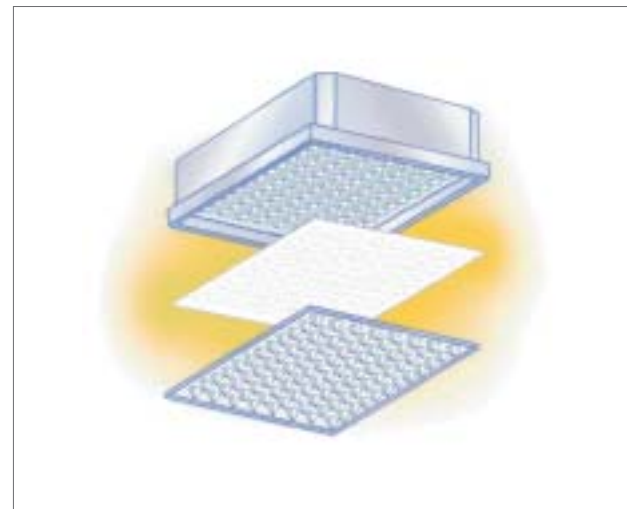
UNIFILTER® Filtration Microplates

The proprietary Whatman UNIFILTER microplates with filter-bottom wells are convenient and ready to use. Available in 24, 96 and 384 Well formats, UNIFILTER microplates offer a choice of filter media to meet exact application requirements.

The unique drip director design of Whatman UNIFILTER microplates ensures precise collection of the filtrate to allow for further processing and analysis. UNIFILTER microplates are available in a range of well volumes from 100 µL to 10 mL.

Features and Benefits

- No cross talk. Patented integral filter design prevents well-to-well cross contamination.
- Economical to use. Wide range of well volume options ensures efficient use of materials.
- Better control. Choice of filter media allows control of the flow rates and retention characteristics.
- Versatile. A broad range of filtration media is available including glass fiber, polypropylene, cellulose nitrate, cellulose acetate, nylon and ion exchange cellulose.



UNIFILTER Construction

Typical Data - UNIFILTER Filtration Microplates

Filter Media	Flow Rate*	Protein Binding	Hydrophilic	Solvent Resistance	Physical Strength	Thermal Resistance °C	General Comments
Cellulose Nitrate (CN)	4	High	Yes	Poor	Brittle	<125	Highly adsorptive membrane typically used for DNA/RNA/protein hybridization, also for ELISA and RIA-based assays.
Cellulose Acetate (CA)	3	Low	Yes	Poor	Moderate	<120	Typically used for low protein binding applications, good wet strength. General purpose microbiological filter.
Polypropylene (PP)	2	Negligible	No	Very Good	Good	<80	Typically used for prefiltration. Sensitive to gamma sterilization. Very low extractables, chemically inert.

contd >

Filter Media	Flow Rate*	Protein Binding	Hydrophilic	Solvent Resistance	Physical Strength	Thermal Resistance °C	General Comments
Polyvinylidene Fluoride (PVDF) Hydrophilic**	4	Low	Yes	Good	Good	<135	Low protein binding, good chemical resistance. Widely used for sample preparation.
Glass Microfiber (GF)	5	Moderate	Yes	Very Good	Poor	High	Wide range available. Typically used as absorptive or adsorptive wicking media and prefilters. Excellent particle retention and resistance to clogging. Used for DNA binding.

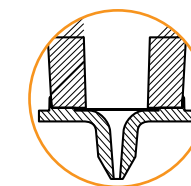
* Flow rate: 1 = low, 5 = high

** Hydrophobic variants are available for high protein binding

24 Well 10 mL UNIFILTER Microplate

The 10 mL UNIFILTER microplate is 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 glass-filled polypropylene construction of the 10 mL UNIFILTER microplate enables chemical and heat-resistant operation. The long drip directors facilitate collection of filtrate with no cross talk.



24 Well 10 mL UNIFILTER Microplate

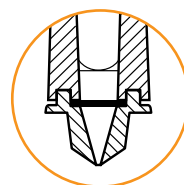
Ordering Information - 24 Well 10 mL UNIFILTER Microplate

Catalog Number	Well Format	Well Volume (mL)	Plate Material	Drip Director	Filter Media	Quantity/Case
7700-9901	24	10	Natural Polypropylene	Long	Whatman GF/C	25
7700-9904	24	10	Natural Polypropylene	Long	25–30 µm Melt Blown Polypropylene	25
7700-9905	24	10	Natural Polypropylene	Long	1 µm PTFE Laminate	25
7700-9917	24	10	Natural Polypropylene	Long	10–12 µm Melt Blown Polypropylene	25

384 Well 100 µL UNIFILTER Microplate

The 100 µL UNIFILTER is the only 384 Well filter microplate with a 100 µL well volume to allow a large enough sample for recovery after filtration. Beneath the filter plate are long drip directors designed to eliminate well to well contamination during the filtration process.

The 384 Well filter plate has been successfully used for DNA template cleanup, cell capture and for the removal of unwanted debris.



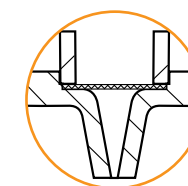
384 Well 100 µL UNIFILTER Microplate

Ordering Information - 384 Well 100 µL UNIFILTER Microplate

Catalog Number	Well Format	Well Volume (µL)	Plate Material	Drip Director	Filter Media	Quantity/Case
7700-1101	384	100	Clear Polystyrene	Long	Whatman GF/C	50
7700-1102	384	100	Clear Polystyrene	Long	Whatman Hydrophobic GF/C	50
7700-2106	384	100	Clear Polystyrene	Long	0.45 µm Hydrophilic PVDF	50
7700-2110	384	100	Clear Polystyrene	Long	DNA Binding	50
7700-2117	384	100	Clear Polystyrene	Long	10 µm Melt Blown Polypropylene	50

96 Well 2 mL UNIFILTER Microplate

The 2 mL UNIFILTER microplate is 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.



Glass Filled Polypropylene 96 Well UNIFILTER

The glass-filled polypropylene construction of the 2 mL UNIFILTER microplate enables chemical and heat-resistant operation. The long drip directors facilitate collection of filtrate with no cross talk.

Two filter media for the 2 mL chemically resistant filter plate are PKP and GF/D. Both are chemically resistant with the PKP used for retaining solvent, while the GF/D is used for fast flow rates.



Protein Precipitation UNIFILTER

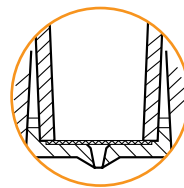
Ordering Information - 96 Well 2 mL UNIFILTER Microplate

Catalog Number	Well Format	Well Volume (mL)	Plate Material	Drip Director	Filter Media	Quantity/Case
7700-7201	96	2	Glass Filled Polypropylene	Long	Whatman GF/C	25
7700-7202	96	2	Glass Filled Polypropylene	Long	Whatman Hydrophobic GF/C	25
7700-7203	96	2	Glass Filled Polypropylene	Long	Whatman GF/B	25
7700-7204	96	2	Glass Filled Polypropylene	Long	25–30 µm Melt Blown Polypropylene	25
7700-7206	96	2	Glass Filled Polypropylene	Long	0.45 µm Hydrophilic PVDF	25
7700-7210	96	2	Glass Filled Polypropylene	Long	Whatman GF/F	25
7700-7211	96	2	Glass Filled Polypropylene	Long	Whatman GF/D	25
7700-7224	96	2	Glass Filled Polypropylene	Long	10 µm PP Membrane	25 contd >

Catalog Number	Well Format	Well Volume (mL)	Plate Material	Drip Director	Filter Media	Quantity/Case
7700-7228	96	2	Glass Filled Polypropylene	Long	Whatman Oleophobic PKP	10
7720-7229-01	96	2	Glass Filled Polypropylene	Long	Phase Separation	1
7720-7235	96	2	Glass Filled Polypropylene	Long	Protein Precipitation	1
7720-7236	96	2	Glass Filled Polypropylene	Long	FF Protein Precipitation	5

96 Well 350 µL UNIFILTER Microplate

The 350µL UNIFILTER is the plate of choice for filter-based assays in high-throughput screening (HTS). It is available in opaque white polystyrene for efficient use with liquid scintillation, fluorescence and chemiluminescence detections. The dimensions are compatible with most microplate readers for screening procedures. These plates are also available in clear polystyrene.



96 Well 350 µL UNIFILTER Microplate

Ordering Information - 96 Well 350 µL UNIFILTER Microplate

Catalog Number	Well Format	Well Volume (µL)	Plate Material	Drip Director	Filter Media	Quantity/Case
7700-3301	96	350	White Polystyrene	Short	Whatman GF/C	50
7700-3302	96	350	White Polystyrene	Short	Whatman Hydrophobic GF/C	50
7700-3303	96	350	White Polystyrene	Short	Whatman GF/B	50
7700-3304	96	350	White Polystyrene	Short	25–30 µm Melt Blown Polypropylene	50
7700-3305	96	350	White Polystyrene	Short	0.45 µm PP Membrane	50
7700-3356	96	350	White Polystyrene	Short	0.45 µm Hydrophobic PVDF	50
7700-3306	96	350	White Polystyrene	Short	0.45 µm Hydrophilic PVDF	50
7700-3307	96	350	White Polystyrene	Short	0.45 µm Cellulose Nitrate	50
7700-3308	96	350	White Polystyrene	Short	0.45 µm Cellulose Acetate	50
7700-3310	96	350	White Polystyrene	Short	Whatman GF/F	50
7770-0001	96	350	White Polystyrene	Short	0.45 µm PVDF (phobic) and 0.45 µm PP	50 contd >

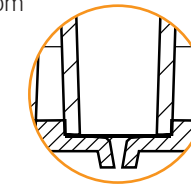
Catalog Number	Well Format	Well Volume (µL)	Plate Material	Drip Director	Filter Media	Quantity/Case
7770-0006*	96	350	White Polystyrene	Short	0.45 µm PVDF (phobic) and 0.45 µm PP Irradiated with Lid	50
7700-3312	96	350	White Polystyrene	Short	Whatman P-81	50
7700-1301	96	350	Clear Polystyrene	Short	Whatman GF/C	50
7700-1303	96	350	Clear Polystyrene	Short	Whatman GF/B	50
7700-1305	96	350	Clear Polystyrene	Short	0.45 µm PP Membrane	50
7700-1356	96	350	Clear Polystyrene	Short	0.45 µm Hydrophobic PVDF	50
7700-1306	96	350	Clear Polystyrene	Short	0.45 µm Hydrophilic PVDF	50
7700-1308	96	350	Clear Polystyrene	Short	0.45 µm Cellulose Acetate	50

* Recommended for ELISPOT assays

96 Well 800 µL UNIFILTER Microplate

The 800 µL UNIFILTER is the microplate most typically used in purifications, isolations and separation of biomolecules, particularly DNA.

The microplate has a well volume of 800 µL, which is ideal for standard DNA plasmid miniprep chemistries. The choice of short or long drip directors is application specific. The UNIFILTER 800 µL is constructed from rigid high grade polystyrene.



96 Well 800 µL UNIFILTER Microplate

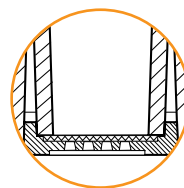
Ordering Information - 96 Well 800 µL UNIFILTER Microplate

Catalog Number	Well Format	Well Volume (µL)	Plate Material	Drip Director	Filter Media	Quantity/Case
7700-1801	96	800	Clear Polystyrene	Short	Whatman GF/C	25
7700-1804	96	800	Clear Polystyrene	Short	25–30 µm Melt Blown Polypropylene	25
7700-1806	96	800	Clear Polystyrene	Short	0.45 µm Hydrophilic PVDF	25
7700-1808	96	800	Clear Polystyrene	Short	0.45 µm Cellulose Acetate	25
7700-1818	96	800	Clear Polystyrene	Short	5–7 µm Melt Blown Polypropylene	25 contd >

Catalog Number	Well Format	Well Volume (µL)	Plate Material	Drip Director	Filter Media	Quantity/Case
7700-2801	96	800	Clear Polystyrene	Long	Whatman GF/C	25
7700-2803	96	800	Clear Polystyrene	Long	Whatman GF/B	25
7700-2804	96	800	Clear Polystyrene	Long	25–30 µm Melt Blown Polypropylene	25
7700-2805	96	800	Clear Polystyrene	Long	0.45 µm PP Membrane	25
7700-2806	96	800	Clear Polystyrene	Long	0.45 µm Hydrophilic PVDF	25
7700-2808	96	800	Clear Polystyrene	Long	0.45 µm Cellulose Acetate	25
7700-2809	96	800	Clear Polystyrene	Long	0.45 µm Nylon Positive	25
7700-2810	96	800	Clear Polystyrene	Long	DNA Binding Plate	25
7700-2811	96	800	Clear Polystyrene	Long	Whatman GF/D	25
7700-2817	96	800	Clear Polystyrene	Long	10–12 µm Melt Blown Polypropylene	25
7720-2830	96	800	Clear Polystyrene	Long	Lysate Clarification Plate	25
7700-2828	96	800	Clear Polystyrene	Long	Whatman Oleophobic PKP	10
7770-0062	96	800	Clear Polystyrene	Long	25 µm Melt Blown Polypropylene over 0.45 µm PP Membrane	25

96 Well UNIFILTER Microplate: Mesh Bottom

Mesh bottom UNIFILTER plates with 150 and 350 µL Wells are designed to accommodate rapid flow rates when vacuuming solutions to waste.



96 Well UNIFILTER Microplate: Mesh Bottom

Ordering Information - 96 Well UNIFILTER Microplate: Mesh Bottom

Catalog Number	Well Format	Well Volume (µL)	Plate Material	Drip Director	Filter Media	Quantity/Case
7700-0512	96	150	White Barex	Mesh	Whatman P-81	50
7700-4301	96	350	White Polystyrene	Mesh	Whatman GF/C	50
7700-4302	96	350	White Polystyrene	Mesh	Whatman Hydrophobic GF/C	50
7700-4303	96	350	White Polystyrene	Mesh	Whatman GF/B	50
7700-4312	96	350	White Polystyrene	Mesh	Whatman P-81	50
7700-4313	96	350	White Polystyrene	Mesh	Whatman DE81	50

Collection Plates

Whatman microplates for collection and analysis are available in 24, 48, 96 and 384 Well formats, all unique to Whatman. These microplates are manufactured from polystyrene, polypropylene and Multi-Chem materials to accommodate a wide range of sampling and storage applications.

Multi-Chem™ Microplates

Multi-Chem is a chemically resistant material that exhibits extremely useful properties over a wide range of applications. Providing an excellent choice for storage applications, Multi-Chem microplates are ideal for aggressive organic solvents such as DMF, TFA, THF, acetonitrile, chloroform and methylene chloride. Non-binding properties of Multi-Chem microplates also make them ideal for storage of biological materials.



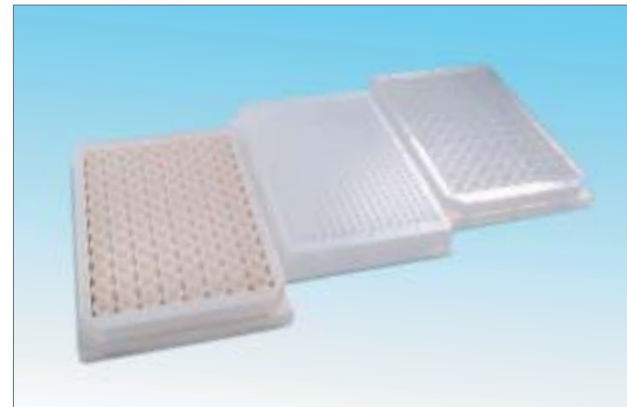
Multi-Chem Microplates

Ordering Information - Multi-Chem Microplates

Catalog Number	Well Format	Well Volume	Plate Material	Well Bottom	Quantity/Case
7701-6102	24	10 mL	Multi-Chem	Round	10
7701-6250	96	250 µL	Multi-Chem	'V'	10
7701-6750	96	750 µL	Multi-Chem	Round	10
7701-6200	96	2 mL	Multi-Chem	Round	10
7701-6101	384	80 µL	Multi-Chem	'V'	10

UNIPLATE™ 'V' Bottom Microplates

The 96 and 384 Well format UNIPLATE with 'V' bottom is ideal for applications with small sample volumes. The vertical sides of the well, combined with the 'V' design at the base of each well, ensure that all the material runs down the side walls and is channelled into the well base. The 'V' bottom ensures maximum sample recovery - typically approximately 99% liquid sample recovery is attained.



UNIPLATE 'V' Bottom Microplates

Ordering Information - UNIPLATE 'V' Bottom Microplates

Catalog Number	Well Format	Well Volume (µL)	Plate Material	Well Bottom	Quantity/Case
7701-1250	96	250	Clear Polystyrene	'V'	50
7701-3250	96	250	White Polystyrene	'V'	50
7701-2250	96	250	Black Polystyrene	'V'	50
7701-5250*	96	250	Natural Polypropylene	'V'	50
7701-5101	384	80	Natural Polypropylene	'V'	50

* Does not comply with SBS standards

UNIPLATE™ Collection and Analysis Microplates

Whatman offers a wide range of UNIPLATE microplates including various well profiles, well volumes and well densities, in diverse polymer materials. Most UNIPLATE microplates conform to the ANSI/SBS microplate standard and fit most microplate readers and automated plate handling devices.

Whatman UNIPLATE microplates are suitable for a wide range of applications, including simple filtrate collection, when used in conjunction with our UNIFILTER microplates, as well as homogeneous assay techniques utilized in HTS.

Features and Benefits

- Widest selection from a single source. Choice of well volumes ranging from 80 µL to 10 mL, well densities from 24 to 384 Wells with round or 'V' bottom for maximum recovery.
- Chemical compatibility. Available in chemically resistant polymers capable of withstanding low temperatures for long-term storage. Opaque plates prevent optical cross talk in light emitting assays.
- Conforms to SBS microplate standard.
- Guaranteed for use with robotic handlers and centrifuge carriers.

Applications

- Sample storage
- Assay development
- High-throughput screening
- Plasmid miniprep
- ELISA assays
- Luminescence/chemiluminescence
- Cell culture
- Filtrate collection



384 Well 400 µL UNIPLATE



UNIPLATE Collection Microplates

Ordering Information - UNIPLATE Collection and Analysis Microplates

Catalog Number	Well Format	Well Volume	Plate Material	Well Bottom	Irradiated with Lid	Quantity/Case
7701-0176	Single	75 mL	Clear Polystyrene	Flat with Grid	No	50
7701-7300*	24	3 mL	Black Polypropylene	Flat (Square Well)	No	25
7701-5102	24	10 mL	Natural Polypropylene	Round	No	25
7701-5110	24	10 mL	Natural Polypropylene	Round	Yes	25
7701-1150	48	1.5 mL	Clear Polystyrene	Flat	No	50
7701-5500	48	5 mL	Natural Polypropylene	Flat (Rectangular Well)	No	25
7701-5505	48	5 mL	Natural Polypropylene	Flat	Yes	25
7701-1350	96	300 µL	Clear Polystyrene	Flat	No	50 contd >

Catalog Number	Well Format	Well Volume	Plate Material	Well Bottom	Irradiated with Lid	Quantity/Case
7701-3350	96	300 µL	White Polystyrene	Flat	No	50
7701-2350	96	300 µL	Black Polystyrene	Flat	No	50
7701-5350*	96	300 µL	Natural Polypropylene	Flat	No	50
7701-4350*	96	300 µL	White Polypropylene	Flat	No	50
7701-7350*	96	300 µL	Black Polypropylene	Flat	No	50
7701-1651	96	650 µL	Clear Polystyrene	Flat (Square Well)	No	50
7701-1750	96	750 µL	Clear Polystyrene	Round	No	25
7701-5750	96	750 µL	Natural Polypropylene	Round	No	25
7701-1800	96	800 µL	Clear Polystyrene	Flat	No	25
7701-5200	96	2 mL	Natural Polypropylene	Round	No	25
7701-5205	96	2 mL	Natural Polypropylene	Round	Yes	25
7701-1100	384	100 µL	Clear Polystyrene	Flat	No	50
7701-3100	384	100 µL	White Polystyrene	Flat	No	50
7701-2100	384	100 µL	Black Polystyrene	Flat	No	50
7701-5400	384	400 µL	Natural Polypropylene	Square to Round	No	25

* Does not comply with SBS standards

Specialty Microplates

Whatman offers a unique range of specialty microplates to meet the demanding requirements of sample preparation in the life sciences market.

Clear View™ Microplates

Whatman Clear View microplates have optically clear polymer bottoms. They eliminate the need for numerous transfer steps by providing the means to grow, observe, count and assay cells in a single device. Tissue culture treatment facilitates cell adhesion. Whatman Clear View microplates have a very low visible-wavelength absorbance background.

Ordering Information - Clear View Microplates

Catalog Number	Well Format	Well Volume (µL)	Plate Material	Quantity/Case
No Surface Treatment, No Lid				
7706-2380	96	300	Black Polystyrene	50
7706-2103	384	100	Black Polystyrene	50
7706-3103	384	100	White Polystyrene	50
Tissue Culture Treated, Irradiated with Lid				
7716-2380	96	300	Black Polystyrene	50
7716-3380	96	300	White Polystyrene	50

Glass Bottom Microplates

Whatman Glass Bottom microplates are designed for high-sensitivity detection including fluorescent and luminescent detection and scintillation counting, where extremely low backgrounds with no cross talk are needed. Glass Bottom microplates have excellent uniformity in flatness and thickness (0.175 mm glass thickness) to provide optically clear as well as optically flat surfaces. This ensures confluence and planarity for confocal imaging and detection techniques.

They are suitable for FRET and GFP. The skirtless glass bottom plate allows the bottom of the plate to be positioned very close to microscope objectives. This is the plate of choice for Zeiss Confocal Microscopes. The Glass Bottom microplates are available in clear and black in a 96 Well format.

Features and Benefits

- Superior optical clarity
- Optics using single or dual wavelength probe
- Sensitive
- Absolute flatness

Applications

- Receptor-ligand interaction
- DNA-protein interaction
- Enzyme studies
- Cell based assays



Glass Bottom Microplates

Ordering Information - Glass Bottom Microplates

Catalog Number	Well Format	Well Volume (µL)	Plate Material	Characteristics	Quantity/Case
Tissue Culture Treated, Irradiated with Lid, Standard Skirt					
7716-2375	96	300	Black Polystyrene	Glass	5
Tissue Culture Treated, Irradiated with Lid, Skirtless for Microscopy					
7716-2370	96	300	Black Polystyrene	Glass	5
No Surface Treatment, Standard Skirt					
7706-2375	96	300	Black Polystyrene	Glass	5
No Surface Treatment, Skirtless for Microscopy					
7706-1365	96	300	Clear Polystyrene	Glass	5
7706-2370	96	300	Black Polystyrene	Glass	5

UniCell™ Microplates

The UniCell 24 microplate is a versatile product that is specifically designed for cell culture.

The UniCell 24 consists of three components:

- 24 Well filtration microplate containing a polycarbonate membrane with a pore size of 0.4 µm
- 24 Well feeder tray with round wells which have a volume of 3.5 mL
- Polystyrene lid cover

The polycarbonate membrane is ideal for cell culture because it is not toxic to cells and will not inhibit cell growth. It is the ideal material to allow formation of a confluent monolayer of mammalian cells.



UniCell Microplates

The membrane becomes translucent when wet and retains its strength, allowing for the harvesting of cells either by sloughing or by mechanical removal off the membrane. The growth well, contained in the top microplate, sits neatly inside the feeder tray. Each well is completely sealed and sits in its own individual feeder well. The complete UniCell 24 is supplied irradiated and tissue culture treated. The clearance between the bottom of the membrane and the bottom of the feeder tray is 2 mm.

Applications

- Permeability studies
- Co-cultivation
- Tissue resistance
- Cell migration
- Toxicology

Ordering Information - UniCell Microplates

Catalog Number	Well Format	Plate Material	Filter Media	TC Treated/Irradiated	Quantity/Case
7703-1400	24	Polystyrene	0.4 µm Polycarbonate Membrane	Yes	5

UniPCR™ Microplates

The UniPCR line of microplates is designed to meet the demanding needs of high-throughput genomics laboratories and is compatible with most thermocyclers. Suitable for PCR amplification, these microplates are produced with a special polymer for good thermal conductivity.



UniPCR Microplates

Ordering Information - UniPCR Microplates

Catalog Number	Well Format	Well Volume (µL)	Plate Material	Characteristics	Quantity/Case
7703-1901	96	200	Thin Walled, Clear Copolymer	PCR Thermal Cyclers	50
7703-1305	384	25	Thin Walled, Clear Copolymer	PCR Thermal Cyclers	50

*PCR is patented by Hoffman LaRoche Ltd

Multiwell Accessories

Whatman offers a line of multiwell plate accessories to simplify your testing processes. The product line includes capmats, seals, lids, vacuum manifolds and accessories for Biomek 2000 and F/X liquid handling systems.

Biomek® and Liquid Handling System Accessories

Designed specifically for the Biomek 2000 and F/X liquid handling systems from Beckman Coulter, Whatman Adapter Collars eliminate many of the problems common to generic vacuum systems such as cross contamination, unnecessary collection steps and the need for spacer plates.

The adapter collars are offered in two sizes to accommodate the wide range of Whatman specialty filter and collection plates - small, to enable collection into standard 300 µL collection and filter plates (~14 mm high), and medium, to accommodate collection into 800 µL collection and filter plates (~30 mm high). Chemically resistant and easy to install, Whatman Adapter Collars ensure quality is maintained in a wide range of high-throughput applications. When vacuuming to waste during wash steps, the 96 Well Filtrate Director assures crosstalk-free filtration by isolating the flow from each well without collecting it.



Adapter Collars for Biomek 2000

Ordering Information - Biomek Accessories

Catalog Number	Description	Quantity/Case
7705-0120	Small Whatman Collar	1
7705-0121	Medium Whatman Collar	1
7725-0118	96 Well Filtrate Director	25
Protocol*	PCR Cleanup 96-Biomek Protocol	1
Protocol*	Plasmid Miniprep 96-Biomek Protocol	1

* Note: Downloadable protocols are available at www.whatman.com

BugStopper® Microplate Capmat

Whatman BugStopper Capmats provide a simple and reliable method for venting cultures being grown in a 24 Well microplate. This reusable sterile closure, which is produced using chemically resistant biosafe silicone rubber, incorporates hydrophobic microfilters which provide an ideal vent for each well.



BugStopper Microplate Capmat

More efficient than plastic lids, test comparisons confirm that BugStopper Capmats improve cell growth and significantly reduce evaporation. The silicone rubber portion of the capmat reseals after puncture, thus keeping cell cultures sterile during inoculation or aspiration.

Sterile Venting Closures for Microplate Cultures

- More efficient than plastic lids. Perfect for extended growth of slow growing bacteria and fungi.
- Positive seal for every well. Significantly reduces evaporation rate and eliminates well-to-well cross contamination.
- Autoclave and reuse. Cost-effective: repeated autoclave cycles do not affect gas exchange or retention capabilities.
- Rated 99.9% efficient for bacteria and viruses. Restricts microorganisms while allowing O₂ and CO₂ to pass through the membrane.
- Prevents aerosol formation. Suitable for growth of infectious microorganisms.

Ordering Information - BugStopper Microplate Capmat

Catalog Number	Well Format	Item	Material	Quantity/Case
7704-0014	24	BugStopper Venting Capmat for 10 mL Microplates	Silicone Rubber	5
7701-5102*	24	Growth Plate, 10 mL, Round-bottom	Polypropylene	25

* Collection plate

Flexible Capmats

Whatman Flexible Capmats individually seal the top of each well. Capmats may be used on either filter or collection microplates.



Flexible Capmats

Ordering Information - Flexible Capmats

Catalog Number	Well Format	Capmat Material	Microplate Compatibility	Quantity/Case
Capmats				
7704-0004	96	Square Format EVA	2 mL Microplates	100
7704-0005	96	Round Format EVA	750 μ L and 800 μ L Microplates	100
7704-0006	48	Rectangular Format EVA	5 mL Microplates	100
7704-0007	24	Square Format Santoprene	10 mL Microplates	100
7704-0015	384	Square Format Santoprene	400 μ L Microplates	100
Pierceable Capmats				
7704-0104	96	Square Format Silicone	2 mL Microplates	50
7704-0105	96	Round Format Silicone	300 μ L, 750 μ L and 800 μ L Microplates	50
7704-0115	384	Square Format Silicone	100 μ L and 400 μ L Microplates	50
Venting Capmats (autoclavable)				
7704-0014	24	BugStopper Venting	10 mL Microplates	5

Lids

Lids are suitable for using as dust covers and to prevent splashing or contamination when plates are being moved around the laboratory.



Polystyrene Microplate Lids

Ordering Information - Lids

Catalog Number	Lid Material	Quantity/Case
7704-1001	Clear Polystyrene Universal Lid	100
7704-1002	Natural Polypropylene Lid	100

Seals

Seals are used to control humidity and reduce evaporation of samples. They prevent spills and contamination. Cold seals are self-sticking with inert adhesive. Heat seals are available in a clear polypropylene or aluminum foil. Heat seals are for polypropylene microplates only and are applied with heat and pressure.



Microplate Seals

Ordering Information - Seals

Catalog Number	Description	Quantity/Case
7704-0001	Clear Polyester Thin Cold Sealing Film, Adhesive Backing, 0.05 mm thick	100
7704-0009	Clear Polypropylene Cold Sealing Film, Adhesive Backing, 0.05 mm thick	100
7704-0002	Aluminum Foil, Applied with Heat and Pressure	100
7704-0003	Clear Polypropylene Film, Applied with Heat and Pressure	100

UniVac™ Vacuum Manifolds

UniVac 1 Vacuum to Waste Manifold

The Whatman UniVac 1 is a single station unit that can be used for evacuating all liquid from a filter plate to waste, when the filtrate is not required for further analysis.



UniVac 1 Vacuum to Waste Manifold

UniVac 3 Vacuum to Collect Manifold

The Whatman UniVac 3 is a universal filter/collection manifold designed to hold all the UNIPLATE formats from 100 µL to 10 mL.

The specially designed drip directors beneath the UNIFILTER plate ensure that the filtrate is directed into the corresponding well of the receiving UNIPLATE. The UniVac 3 comes complete with vacuum gauge, regulator and two-way control valve.



UniVac 3 Vacuum to Collect Manifold

Ordering Information - UniVac Vacuum Manifolds

Catalog Number	Description	Quantity/Case
UniVac 1 Vacuum to Waste Manifold		
7705-0101	Polyurethane Vacuum Manifold for Filtering to Waste	1
UniVac 3 Vacuum to Collect Manifold		
7705-0102	Teflon Coated Aluminum Filter/Collect Vacuum Manifold for Volumes from 100 µL to 10 mL	1
7705-0106	Solid Teflon Filter/Collect Vacuum Manifold for Volumes from 100 µL to 10 mL	1
7705-0107	Acrylic Filter/Collect Vacuum Manifold for Volumes from 100 µL to 10 mL	1
7705-0108	Replacement Viton gaskets for Filter/Collect Manifold	5
7705-0109	Replacement Viton o-rings for Filter/Collect Manifold	5

VacAssist™ Vacuum Assist Frame

The Whatman VacAssist is a thin, transparent Teflon membrane stretched inside a light metal frame that fits on top of the UNIFILTER during the vacuuming process. If one well empties before the others, this patented device automatically seals the mouth of the empty well, allowing the other wells to evacuate. One VacAssist is supplied with each UniVac 3.



VacAssist Vacuum Assist Frame

Ordering Information - VacAssist Vacuum Assist Frame

Catalog Number	Description	Quantity/Case
7705-0112	Vacuum Assist Frame	1