PALL Laboratory

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Simplifying Sample Prep for Research Laboratories

Products for molecular purification and characterization, media prep, analytical chemistry and microbiology

*Filtration. Separation. Solution.*SM

Simplifying Sample Prep

Pall Laboratory develops and produces many different membrane chemistries and devices for a multitude of applications.

This brochure will help you select from molecular purification and characterization, media prep, analytical chemistry and microbiology products designed to maximize processing accuracy and speed. Many other products are also available. Visit www.vwr.com/Pall for more product information.

Sterile Acrodisc® Syringe Filters

Superior flow rate and higher throughput than competitive devices

- Low extractables/surfactant-free, inherently hydrophilic membrane for reliable performance
- Low protein binding to minimize sample loss
- Available with built-in pre-filter for increased throughput of difficult-to-filter liquids (heavy particulate load)
- Easy to use luer lock fittings
- Available in a variety of sizes to accomodate volumes from 10 - 150 mL
- Sterilized by gamma irradiation to eliminate potential contamination by EtO residuals

Applications

- Filtration of cell and tissue culture media and additives
- Clarification of biological fluid, protein, enzyme, probe and hybridization buffers, and other aqueous samples
- Filtration of aqueous solutions
- Filtration where low protein binding is desired
- For cell cryopreservation, use DMSO-safe Acrodisc syringe filters
- Separation of leukocytes from whole blood

Ordering Information

Acrodisc Syringe Filters with Supor® (Polyethersulfone) Membrane

VWR Cat No.	Pall Part. No.	Description	Pkg
28143-312	4614	0.45 µm, 25 mm	50/pkg
28150-956	4650	5 µm, 32 mm	50/pkg
28143-350	4652	0.2 µm, 32 mm	50/pkg
28143-352	4654	0.45 µm, 32 mm	50/pkg
28144-009	4187	0.8/0.2 µm, 25 mm	50/pkg
28139-702	4658	0.8/0.2 µm, 32 mm	50/pkg
28143-300	4602	0.2 µm, 13 mm	75/pkg
28143-302	4604	0.45 µm, 13 mm	75/pkg
28143-310	4612	0.2 µm, 25 mm	50/pkg

Serum Acrodisc Syringe Filter with Supor Membrane

VWR Cat No.	Pall Part. No.	Description	Pkg
28143-295	4525	Glass fiber/0.2 µm, 37 mm	20/pkg

DMSO-Safe Acrodisc Syringe Filter

VWR Cat No.	Pall Part. No.	Description	Pkg
28144-050	4433	0.2 µm, Nylon membrane, 25 mm	50/pkg

Acrodisc WBC (White Blood Cell) Syringe Filter

VWR Cat No.	Pall Part. No.	Description	Pkg
76382-924	AP-4951	Leukosorb, 25 mm	10/pkg
76361-280	AP-4952	Leukosorb, 25 mm	50/pkg

Visit www.vwr.com for additional part numbers, sizes, and pricing.

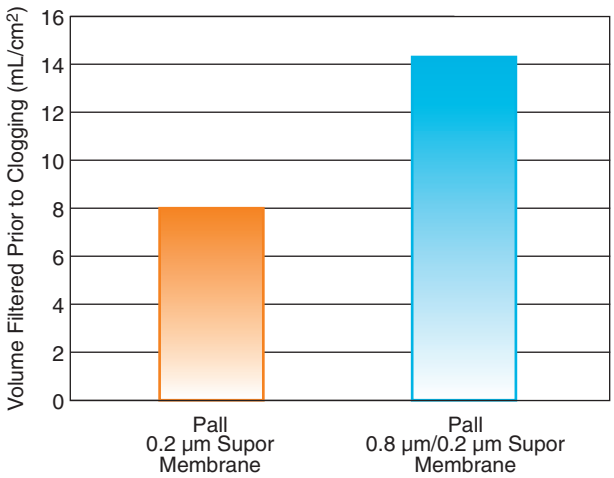
AcroPak™ 20 Filters and AcroPak 200 Capsules with Supor Membrane

Built in pre-filter for fast and efficient processing

- Low extractables/surfactant-free Supor polyethersulfone membrane has high flow rates, high throughputs and low protein binding
- Built-in pre-filter layering, 0.8 / 0.2 µm, extends filter life for particulate-laden solutions such as serum-containing media
- Process up to 2 L with Acropak 20 and up to 20 L with Acropak 200
- Tapered hose barb inlet to attach easily to pressurized systems or peristaltic pump
- Upstream vent to prevent vapor lock

Applications

- Small to medium volume sterile filtration of fluids containing dilute proteins, preservatives, or other critical components
- Filtration of cell and tissue culture media and additives
- Ideal for filtration of aqueous buffers and cell culture media
- Point-of-use filtration of lab water



Membrane Type: 47 mm disc
Throughput determined using 2.5% TSB.

Ordering Information

Acropak 20 Filter with Supor Membrane

VWR Cat. No.	Pall Part No.	Description	Pkg
28143-847	12203	0.8 / 0.2 µm, gamma irradiated, with filling bell	3/pkg

Acropak 200 Filter with Supor Membrane

VWR Cat. No.	Pall Part No.	Description	Pkg
28143-969	12941	0.8 / 0.2 µm, gamma irradiated, with filling bell	3/pkg

Visit www.vwr.com for additional part numbers, sizes, and pricing.

VacuCap® Vacuum Filtration Devices

Innovative bottle-top filters can fill multiple bottles with one device

- Ability to process up to 5 L volumes
- Reduces storage space and waste
- Environmentally-friendly with minimal plastic waste
- Draws liquid directly from the mixing reservoir
- Eliminates possibility of contamination from transfer steps by filtering directly into sterile container
- Low extractables/surfactant-free Supor membrane provides high flow rates
- Available with built-in pre-filter to prevent clogging and to increase throughput of high-particulate solutions

Applications

- Vacuum-driven filtration of cell and tissue culture media, microbiological media, aqueous solutions, protein solutions, and buffers
- Prefiltration or clarification of aqueous solutions
- PF version useful for filtration of hard-to-filter solutions or where fast flow rates and maximum filtration volume is required

Instructions

1. Connect the feed tubing to the port marked “INLET” on the VacuCap device. Place the opposite end of the tubing in the unfiltered fluid to be drawn.

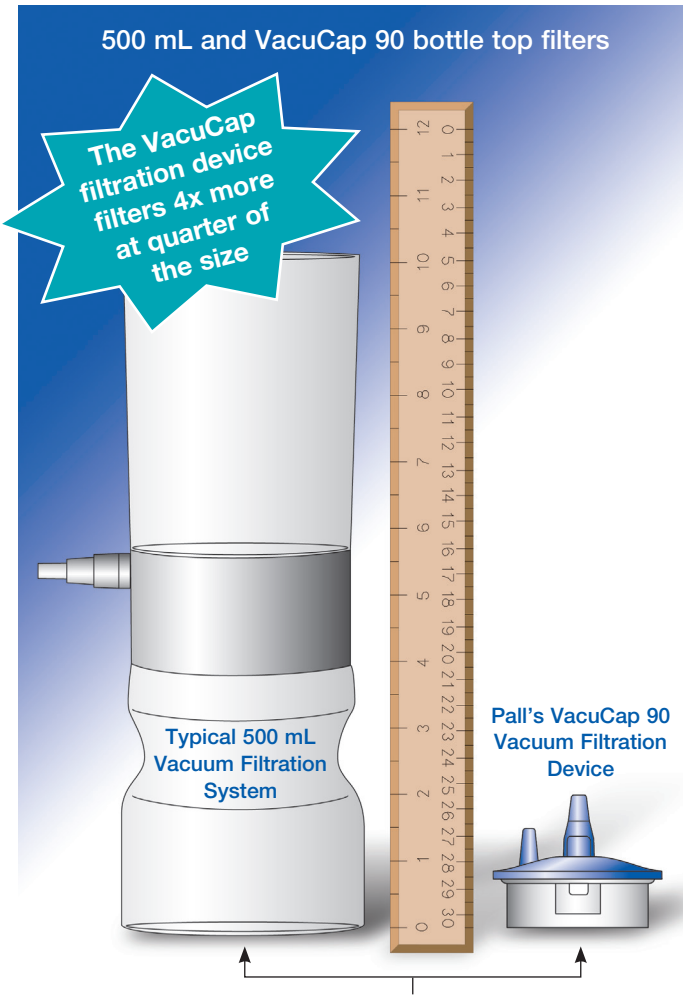
2. Connect the vacuum tubing to the port marked “VACUUM” on the VacuCap device. Refer to product insert for safety precautions.

3. While holding the VacuCap device securely on the filtrate container, start the vacuum. The VacuCap device will seal securely to the container top and fluid will be drawn.

4. When filtration is complete, switch off the vacuum pump allowing the vacuum inside the receiving container to dissipate. Refer to the product insert for complete instructions.

Process More per Unit and Reduce Plastics Waste

Reduce storage needs while reducing waste cost compared with typical vacuum filtration systems



Devices shown in this comparison can filter equivalent volumes.

Product rendering and ruler are not to scale.

Ordering Information

VacuCap 90 Devices, Gamma Irradiated (1 L - 5 L)

VWR Cat No.	Pall Part. No.	Description	Pkg
28143-316	4621	0.1 µm, 90 mm	10/pkg
28143-315	4622	0.2 µm, 90 mm	10/pkg
28143-317	4624	0.45 µm, 90 mm	10/pkg
28139-706	4628	0.8/0.2 µm, 90 mm	10/pkg
28143-338	TA4622	0.2 µm, 90 mm (with individually attached tubing)	10/pkg

Visit www.vwr.com/pall for additional part numbers, sizes, and pricing.

** Always use bottles designed for use with vacuum.*

Centrifugal Filtration Devices

Ensure rapid processing of samples with typical recoveries greater than 90%

Nanosep®

- Simple, reliable concentrating and desalting of 50 to 500 µL samples

Microsep™ Advance

- Confidence in rapid recovery of <100 µL volumes of concentrate from starting volumes up to 5 mL

Macrosep® Advance

- Quickly concentrates up to 20 mL of biological sample without valuable sample loss

Application

For use with proteins and nucleic acids

- Concentration
- Buffer exchange
- De-salting
- Fractionation
- Nucleic Acid Binding

Ordering Information

Nanosep Centrifugal Devices with Omega Membrane

VWR Cat No.	Pall Part. No.	Description	Pkg
29300-606	OD003C33	3K, gray	24/pkg
29300-608	OD010C33	10K, blue	24/pkg
29300-610	OD030C33	30K, red	24/pkg
29300-612	OD100C33	100K, clear	24/pkg
29300-614	OD300C33	300K, orange	24/pkg

Nucleic Acid Binding Nanosep Centrifugal Device

VWR Cat No.	Pall Part. No.	Description	Pkg
76360-454	ODNABC33	Glass Fiber, white	24/pkg
76360-456	ODNABC34	Glass Fiber, white	100/pkg

Microsep Advance Centrifugal Devices with Omega Membrane

VWR Cat No.	Pall Part. No.	Description	Pkg
89233-876	MCP001C41	1K, yellow	24/pkg
89132-004	MCP003C41	3K, gray	24/pkg
89132-008	MCP010C41	10K, blue	24/pkg
89132-012	MCP030C41	30K, red	24/pkg
89132-016	MCP100C41	100K, clear	24/pkg

Macrosep Advance Centrifugal Devices with Omega Membrane

VWR Cat No.	Pall Part. No.	Description	Pkg
89233-882	MAP001C37	1K, yellow	24/pkg
89131-974	MAP003C37	3K, gray	24/pkg
89131-980	MAP010C37	10K, blue	24/pkg
89131-986	MAP030C37	30K, red	24/pkg
89131-992	MAP100C37	100K, clear	24/pkg

Visit www.vwr.com/pall for additional part numbers, sizes, and pricing.

Concentration Selection Guide

Nanosep and Microsep Advance Centrifugal Devices

The Nanosep and Microsep concentration selection guides are meant to serve as a recommendation for concentrating protein samples. The total volume of liquid in the device determines the final retentate volume. By adding buffer under the device insert, you can set your dead stop volume and thereby select the concentration factor.

Nanosep Centrifugal Device

Concentration selection guide for Nanosep centrifugal devices

Concentration Factor (Fold)	Starting Sample Volume (µL)	Volume Added to Collection Tube (µL)	Final Rententate Volume (µL)
2	200	572	100
3	200	530	67
4	200	508	50
5	200	496	40
6	200	487	33
10	200	470	20
20	200	470	10
25	200	455	8

The above table shows what buffer volume should be added to the collection tube under the insert to achieve desired concentration factors for 200, 300 and 400 µL starting sample volumes in the insert.

For instance, if you would like to concentrate 200 µL of starting material by ten-fold (see highlight in table), the buffer volume to be added to the collection tube would be 470 µL, leaving 20 µL of concentrated material in the retentate. For the complete Concentration Selection Guide visit: www.vwr.com/Pall.

Microsep Advance Centrifugal Device

Concentration selection guide for Microsep Advance centrifugal devices

Concentration Factor (Fold)	Starting Sample Volume (mL)	Volume Added to Collection Tube (mL)	Final Rententate Volume (mL)
2	3.00	6.69	1.50
3	3.00	5.76	1.00
4	3.00	5.29	0.75
5	3.00	5.02	0.60
6	3.00	4.83	0.50
10	3.00	4.46	0.30
20	3.00	4.18	0.15
25	3.00	4.12	0.12

The above table shows what buffer volume should be added to the collection tube under the insert to achieve desired concentration factors for 3, 4 and 5 mL starting sample volumes in the insert.

MWCO Selection Guide for Ultra-Filtration Devices

MWCO Selection for Protein Applications

MWCO	Biomolecule Molecular Weight
1K, yellow	3K - 10K
3K, gray	10K - 20K
10K, blue	30K - 90K
30K, red	90K - 180K
50K, green	150K - 300K
100K, clear	300K - 900K

MWCO Selection for Nucleic Acid Applications

MWCO	Base Pairs (DS)	Bases (SS)
1K, yellow	5 - 16 Bp	9 - 32 Bs
3K, gray	16 - 32 Bp	32 - 65 Bs
10K, blue	50 - 145 Bp	95 - 285 Bs
30K, red	145 - 285 Bp	285 - 570 Bs
50K, green	240 - 475 Bp	475 - 950 Bs
100K, clear	475 - 1,450 Bp	950 - 2,900 Bs

MWCO Selection for Virus Applications

MWCO	Membrane Nominal Pore Size	Virus or Particle Diameter
100K	10 nm	30 – 90 mm
300K*	35 nm	> 90 nm

AcroPrep™ Filter Plates

For high throughput sample prep and detection procedures

96 and 384-well Filter Plates

- Provide consistency in filtration times, as well as efficient sample and bead recovery
- Available in a variety of membranes, well volumes, and outlet tip lengths
- Plates are constructed from chemically-resistant, biologically-inert polypropylene
- Automation compatible – Manufactured in accordance with SBS guidelines

Applications

- Concentration, purification, and desalting of proteins and peptides
- Bead-/resin-based applications
- Gross fractionation and lysate clarification
- pDNA, gDNA, and total RNA purification
- General filtration

Ordering Information

Concentration, Buffer Exchange, Desalting of Proteins and Peptides and Nucleic Acids

VWR Cat. No.	Pall Part No.	Description	Pkg
97052-106	8033	350 µL, 96-well, Omega 3K MWCO	10/pkg
97052-108	8034	350 µL, 96-well, Omega 10K MWCO	10/pkg
97052-110	8035	350 µL, 96-well, Omega 30K MWCO	10/pkg
97052-112	8036	350 µL, 96-well, Omega 100K MWCO	10/pkg
89135-696	8163	1 mL, 96-well, Omega 3K MWCO	5/pkg
89135-698	8164	1 mL, 96-well, Omega 10K MWCO	5/pkg
89135-700	8165	1 mL, 96-well, Omega 30K MWCO	5/pkg
89135-702	8166	1 mL, 96-well, Omega 100K MWCO	5/pkg
16003-814	5076	100 µL, 384-well, Omega 10K MWCO, long tips	10/pkg
16003-816	5077	100 µL, 384-well, Omega 10K MWCO	10/pkg
16003-818	5078	100 µL, 384-well, Omega 30K MWCO, long tips	10/pkg
16003-820	5079	100 µL, 384-well, Omega 30K MWCO	10/pkg
16003-822	5080	100 µL, 384-well, Omega 100K MWCO, long tips	10/pkg
16003-824	5081	100 µL, 384-well, Omega 100K MWCO	10/pkg

Bead-/Resin-Based Applications

VWR Cat. No.	Pall Part No.	Description	Pkg
97052-102	8027	350 µL, 96-well, 30-40 µm PP/PE non-woven media	10/pkg
97052-118	8049	350 µL, 96-well, for multiplex assays	10/pkg

Gross Fractionation and General Filtration

VWR Cat. No.	Pall Part No.	Description	Pkg
97052-124	8119	1 mL, 96-well, 0.2 µm Supor membrane	5/pkg
97052-126	8129	1 mL, 96-well, 0.45 µm Supor membrane	5/pkg
97052-128	8130	1 mL, 96-well, 1.2 µm Supor membrane	5/pkg

Lysate Clarification

VWR Cat. No.	Pall Part No.	Description	Pkg
97052-116	8075	350 µL, 96-well, 3 µm glass fiber/0.2 µmSupor membrane	10/pkg
97052-114	8040	350 µL, 96-well, 3 µm glass fiber/1.2 µm Supor membrane	10/pkg
97052-130	8175	1 mL, 96-well, 3 µm glass fiber/0.2 µm Supor membrane	5/pkg
97052-132	8275	2 mL, 96-well, 3 µm glass fiber/0.2 µm Supor membrane	5/pkg

Solvent Filtration

VWR Cat. No.	Pall Part No.	Description	Pkg
76308-642	8582	350 µL 0.2 µm wwPTFE	10/pkg
76308-644	8584	350 µL 0.45 µm wwPTFE	10/pkg
76308-646	8682	1 mL 0.2 µm wwPTFE	5/pkg
76308-648	8684	1 mL 0.45 µm wwPTFE	5/pkg
76308-650	8782	2 mL 0.2 µm wwPTFE	5/pkg
76308-652	8784	2 mL 0.45 µm wwPTFE	5/pkg

Nucleic Acid Binding

VWR Cat. No.	Pall Part No.	Description	Pkg
10158-728	8133	1 mL, 96-well, for Nucleic Acid Binding, long tips	5/pkg

24-well Filter Plates

- Comprehensive 24-well filter plate portfolio
- Available with high performance membranes for specific applications and workflow needs
- Plates are constructed from chemically-resistant, biologically-inert polypropylene
- 7 mL volume capacity
- Automation compatible – Manufactured in accordance with SBS guidelines

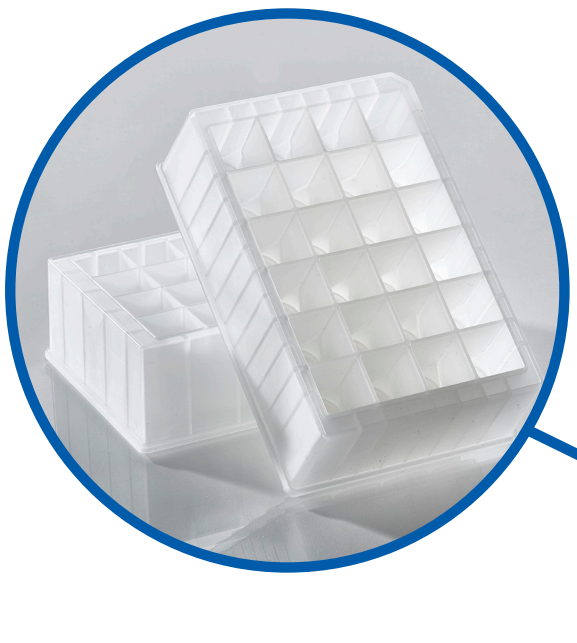
Applications

- Concentration, purification, and desalting of proteins and peptides
- Cell clarification
- Clone selection and clone candidate analysis
- Recombinant protein isolation prior to analysis
- Sterile filtration
- General filtration

Ordering Information

Cell Clarification and Sterile Filtration

VWR Cat. No.	Pall Part No.	Description	Pkg
76360-448	97016	7 mL, Seitz Depth Media/0.2 µm Supor EKV	2/pkg
76360-446	97026	7 mL, Seitz Depth Media/0.2 µm Supor EKV	8/pkg



General Filtration

VWR Cat. No.	Pall Part No.	Description	Pkg
76457-240	97029	7 mL, 0.1 µm Supor	8/pkg
76457-242	97030	7 mL, 0.1 µm Supor	2/pkg
76360-452	97017	7 mL, 0.2 µm Supor EKV	8/pkg
76360-450	97027	7 mL, 0.2 µm Supor EKV	2/pkg
76457-244	97031	7 mL, 0.45 µm Supor	8/pkg
76457-246	97032	7 mL, 0.45 µm Supor	2/pkg
76457-248	97033	7 mL, 0.8 µm Supor	8/pkg
76457-250	97034	7 mL, 0.8 µm Supor	2/pkg
76457-252	97035	7 mL, 1.2 µm Supor	8/pkg
76457-254	97036	7 mL, 1.2 µm Supor	2/pkg
76457-256	97047	7 mL, 5 µm Supor	8/pkg
76457-258	97048	7 mL, 5 µm Supor	2/pkg
76457-284	97061	7 mL, 30-40 µm, PP/PE	8/pkg
76457-286	97062	7 mL, 30-40 µm, PP/PE	2/pkg

Concentration, Buffer Exchange, Desalting of Proteins and Peptides and Nucleic Acids

VWR Cat. No.	Pall Part No.	Description	Pkg
76457-260	97049	7 mL, Omega 1K MWCO	8/pkg
76457-262	97050	7 mL, Omega 1K MWCO	2/pkg
76457-264	97051	7 mL, Omega 3K MWCO	8/pkg
76457-266	97052	7 mL, Omega 3K MWCO	2/pkg
76457-268	97053	7 mL, Omega 10K MWCO	8/pkg
76457-270	97054	7 mL, Omega 10K MWCO	2/pkg
76457-272	97055	7 mL, Omega 30K MWCO	8/pkg
76457-274	97056	7 mL, Omega 30K MWCO	2/pkg
76457-276	97057	7 mL, Omega 50K MWCO	8/pkg
76457-278	97058	7 mL, Omega 50K MWCO	2/pkg
76457-280	97059	7 mL, Omega 100K MWCO	8/pkg
76457-282	97060	7 mL, Omega 100K MWCO	2/pkg

Minimate™ EVO Tangential Flow Filtration System

Streamline laboratory-scale concentration, desalting, and buffer exchange processes

- System's plug-n-play design includes all the hardware, tubing, and fittings needed to get your TFF process up and running quickly
- Concentration and diafiltration processes can be performed on the same system with minimal user intervention
- Cost-effective design – easy to clean and reuse

Applications

- Concentrate and desalt proteins, peptides, or nucleic acids (DNA, RNA, oligonucleotides)
- Recover antibodies or recombinant proteins from clarified cell culture media
- Separate (fractionate) large from small biomolecules
- Concentrate viruses or gene therapy vectors
- Prepare samples prior to column chromatography

Ordering Information

Minimate EVO TFF System

VWR Cat. No.	Pall Part No.	Description	Pkg
76409-724	OAPMPUNV	Includes peristalic pump, pump head, 2 pressure gauges, reservoir, stir plate, drip tray, and assorted fittings	1/pkg

Minimate TFF Capsules with Omega™ Membrane

VWR Cat. No.	Pall Part No.	Description (MWCO)	Pkg
29301-900	OA001C12	1K	1/pkg
29301-902	OA003C12	3K	1/pkg
29301-904	OA005C12	5K	1/pkg
29301-908	OA010C12	10K	1/pkg
29301-910	OA030C12	30K	1/pkg
29301-912	OA050C12	50K	1/pkg
29301-914	OA070C12	70K	1/pkg
29301-916	OA100C12	100K	1/pkg
29301-920	OA300C12	300K	1/pkg
29301-922	OA500C12	500K	1/pkg

Visit www.vwr.com/pall for additional part numbers, sizes, and pricing.

FluoroTrans PVDF, FluoroTrans® W PVDF, BioTrace NT, and Biodyne® Transfer Membranes

Membranes for transfer and immobilization

FluoroTrans PVDF, FluoroTrans W PVDF (Hydrophobic Polyvinylidene Fluoride) Transfer Membranes

- Optimized for Western blotting applications
- Sensitive protein detection with low background and very low protein burnthrough
- High tensile strength

BioTrace NT (Nitrocellulose)Transfer Membranes

- 100% pure nitrocellulose, no support fabrics to interfere with signal generation
- High binding capacity for proteins and nucleic acids
- Very low protein burnthrough in electrophoretic transfers

Biodyne (Nylon) Transfer Membranes

- Will not crack, shrink, or tear when subjected to multiple cycles of hybridization, stripping, and reprobing
- Superior performance with radioactive (Biodyne B) and non-radioactive (Biodyne A) detection systems

Applications

- FluoroTrans W PVDF membrane is ideal for Western transfers, protein dot blots, and protein sequencing
- Use BioTrace NT membrane for colony/plaque lifts and protein transfers
- Biodyne membranes are suitable for nucleic acid applications, as well as applications requiring enhanced detection and resolution

Performance

FluoroTrans Membrane Has Excellent Sensitivity, Signal, and Background in Western Transfers

Rabbit reticulocyte lysate (Amersham) was loaded in lanes of polyacrylamide gels at f.s., 1/3 and 1/10 dilutions. After electrophoresis, proteins were transferred to membranes. Membranes were stained with 0.1% Amido Black, 45% methanol, and 2% acetic acid for 4 minutes; then destained for 5 minutes with two changes of 90% methanol and 2% acetic acid. Stained membranes were rinsed in water and air dried.

Ordering Information

FluoroTrans PVDF Transfer Membrane

VWR Cat No.	Pall Part. No.	Description	Pkg
29301-862	PVM020C-160	7 x 8.4 cm sheets	10/pkg
29301-864	PVM020C-195	8.5 x 9 cm sheets	20/pkg
29301-866	PVM020C-196	13 x 14 cm sheets	10/pkg
29301-808	PVM020C-099	26 cm x 3.3 m roll	1/pkg

FluoroTrans W PVDF Transfer Membrane

29301-852	BSP0158	7 x 9 cm sheets	10/pkg
29301-850	BSP0157	10 x 15 cm sheets	10/pkg
29301-854	BSP0159	20 x 20 cm sheets	10/pkg
29301-856	BSP0161	26 cm x 3.3 m roll	1/pkg

BioTrace NT Nitrocellulose Transfer Membrane

27377-000	66489	20 x 20 cm sheets	10/pkg
27376-991	66485	30 cm x 3 m roll	1/pkg

Biodyne A (Nylon) Membrane, 0.45 µm

28150-274	60106	30 cm x 3 m roll	1/pkg

Biodyne B (Nylon) Membrane, 0.45 µm

28150-284	60200	20 x 20 cm sheets	10/pkg
28150-276	60207	30 cm x 3 m roll	1/pkg

Biodyne C (Nylon) Membrane, 0.45 µm

28150-286	60314	20 x 20 cm sheets	10/pkg

Biodyne Plus (Nylon) Membrane, 0.45 µm

28150-288	60400	20 x 20 cm sheets	10/pkg
28150-280	60406	30 cm x 3 m roll	1/pkg

Visit www.vwr.com/pall for additional part numbers, sizes, and pricing.

Vent Air Filters

Protect your cell culture and lab environment

- Designed to protect bioreactors, fermentation tanks, culture vessels, and carboy contents from external contamination and to protect the environment from contaminants within the vessel
- Self-contained, compact air filters provide high efficiency removal of airborne bacteria and particulate under dry or moist conditions
- Vacushield™ vent air filters should be used between pump and receiving vessels to protect the valves and pump components from damage by aqueous solutions and to prolong the life of the pump
- Always select a filter with a sufficient air flow rate to accommodate the air flow required by each application

Applications

- Bioreactors
- Fermentation tanks
- Isolation or environmental chambers
- Receiving vessels
- Carboys
- Other small containers

Ordering Information

Acro® 37 TF Vent Air Filters

VWR Cat No.	Pall Part. No.	Description	Pkg
28143-514	4464	0.2 µm PTFE membrane, 37 mm	24/pkg
28142-395	4465	0.2 µm PTFE membrane, 37 mm	200/pkg

Bacterial Air Vents

VWR Cat No.	Pall Part. No.	Description	Pkg
28145-553	4210	1 µm (nominal) glass, 37 mm	24/pkg
28144-160	4308	1 µm (nominal) glass, 37 mm, gamma-irradiated	10/pkg

Acro 50 Vent Devices with Emflon® II Membrane

VWR Cat No.	Pall Part. No.	Description	Pkg
28143-838	A50V002P2	0.2 µm hydrophobic PVDF membrane, 50 mm	3/pkg

Acro 50 Vent Devices with PTFE Membrane

VWR Cat No.	Pall Part. No.	Description	Pkg
28144-111	4250	0.2 µm hydrophobic PTFE membrane, 50 mm	72/pkg
28143-558	4251	0.2 µm hydrophobic PTFE membrane, 50 mm	18/pkg

Vacushield Vent Air Filters

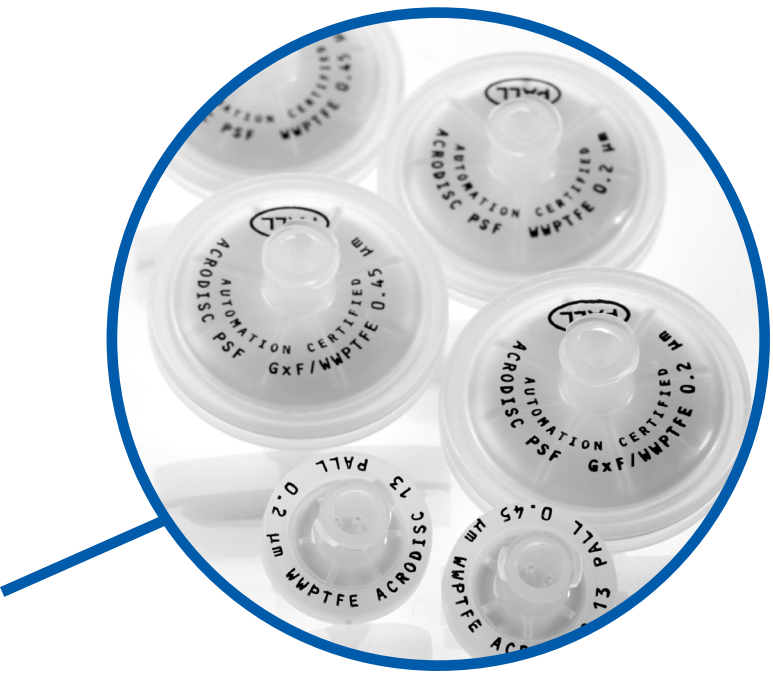
VWR Cat No.	Pall Part. No.	Description	Pkg
55095-006	4402	50 mm, hose barb	3/pkg

Visit www.vwr.com/pall for additional part numbers, sizes, and pricing.

Acrodisc One™ Syringe Filters with wwPTFE Membrane

Universal filter for both organic and aqueous solutions in HPLC and UHPLC sample prep

- Versatile wwPTFE (water wettable polytetrafluoroethylene) membrane for aqueous and aggressive organic solvent-based solutions
- Eliminates the membrane selection process with universal membrane
- Reduces time for method validation with higher analyte recoveries and lower extractables
- Acrodisc One syringe filters with wwPTFE membrane extend HPLC column life up to 52 times
- Certified low levels of UV-absorbing extractables for accurate analysis for HPLC/UHPLC
- Easy filtration of particulate-laden samples with available GxF multilayer pre-filter
- 13 mm Acrodisc syringe filter with minispike configuration offers low hold-up and easy filtration into autosampler vials



Applications

- Highly recommended for filtering HPLC/UHPLC samples and mobile phases
- The Acrodisc One GxF syringe filter provides two to four times the throughput of standard pre-filter devices for extremely viscous samples

Ordering Information

Acrodisc Syringe Filters with wwPTFE Membrane, 13 mm

VWR Cat. No.	Pall Part No.	Description	Pkg
76308-728	2400	0.2 µm, minispike outlet	100/pkg, 300/cs
76308-700	2402	0.45 µm, minispike outlet	100/pkg, 300/cs

Acrodisc One Syringe Filters with wwPTFE Membrane, 25 mm

VWR Cat. No.	Pall Part No.	Description	Pkg
76308-662	AP-4910	0.2 µm	50/pkg, 200/cs
76308-674	AP-4916	0.45 µm	50/pkg, 200/cs
76308-668	AP-4913	GxF/0.2 µm	50/pkg, 200/cs
76308-680	AP-4919	GxF/0.45 µm	50/pkg, 200/cs

Visit www.vwr.com/pall for additional part numbers, sizes, and pricing.

Solvac® Filter Holder

Simplifies clean-up and degassing of mobile phase solvents and other solutions

Applications

- Remove contaminating particulate from mobile phase or other solutions
- De-gas mobile phase solvents and solutions
- Eliminate pour-and-wait filtration

Benefits

- Versatile design fits most HPLC bottles, flasks, and containers, and eliminates the added steps of washing flasks and transferring mobile phase solvent from flask to reservoir
- Draws directly from HPLC solvent bottle. Less likely to spill aggressive solvents than glass funnels or disposable cups.

Ordering Information

Solvac Filter Holder

VWR Cat. No.	Pall Part No.	Description	Pkg
28145-283	4020	SolVac holder with 61 cm (2 ft.) feedline tubing, thumb clamp, sinker, vacuum port adapter, 2 membrane seal gaskets, and 2 seal gaskets	1/pkg

HPLC Mobile Phase Filtration Membranes

Membranes designed for the stringent requirements of mobile phase filtration

Applications

- Remove contaminating particulate from mobile phase or other solutions
- De-gas mobile phase solvents and solutions
- Eliminate pour-and-wait filtration

Benefits

- Membranes are identical in composition and quality to those used in Pall's HPLC-certified Acrodisc syringe filters
- HPLC certification assures that the filters will not add artifacts to your analysis
- wwPTFE membrane is the best choice for filtering mobile phases

Ordering Information

HPLC Mobile Phase Filtration Membranes, 47 mm

VWR Cat. No.	Pall Part No.	Description	Pkg
76308-706	60539	0.2 µm, wwPTFE membrane	50/pkg
76308-712	60548	0.45 µm, wwPTFE membrane	50/pkg
28150-021	66143	0.2 µm, TF (PTFE) membrane	100/pkg
28149-962	66149	0.45 µm, TF (PTFE) membrane	100/pkg
28140-040	66602	0.2 µm, Nylaflo (Nylon) membrane	100/pkg
28140-141	66608	0.45 µm, Nylaflo (Nylon) membrane	100/pkg

Acrodisc® MS Syringe Filter

Certified Syringe Filters for LCMS

- **LCMS (Liquid Chromatography Mass Spectrometry) certified** – Minimize interference in your LCMS results with the Acrodisc MS syringe filter. The first LCMS certified filter with extremely low levels of extractables.
- **Low ion suppression/enhancement** – Reduce the need for retesting. The Acrodisc MS syringe filters will not contribute extractables that will interfere with the ionization process, which is the heart of the LCMS technique.
- **Protective packaging design** – Save money and prevent downtime due to accidental contamination. Acrodisc MS syringe filters are packaged into separate tubes to protect them from external sources of extractables. While one tube is in use, the others are kept sealed.
- **Excellent chemical resistance** – Use this universal filter for all your LCMS samples. The WWPTFE (water wettable polytetrafluoroethylene) membrane can be used with both organic and aqueous solvents. When coupled with a polyethylene housing, the membrane offers excellent chemical resistance.
- **Low protein binding** – Get accurate and confident quantitative results. There is minimal protein adsorption with the Acrodisc MS syringe filters.
- **Particulate retention** – Using Acrodisc MS syringe filters will protect your columns and instrument from particulate build-up, making your columns last longer and your LCMS perform more consistently.

Applications

The Acrodiscs MS syringe filter has been developed specifically for LCMS sample prep applications, such as:

- Molecular identification
- Structural determination
- Pharmacokinetics
- Drug discovery and development
- Drug testing
- Environmental monitoring
- Food safety monitoring
- Oil composition determination

Ordering Information

Acrodisc MS Syringe Filter

VWR Cat. No.	Pall Part No.	Description	Pkg
30621-078	MS-3301	0.2 µm, 13 mm, WWPTFE membrane	60/pkg

Sentino® Microbiology System

Maximize workspace and minimize contamination risk

The Sentino Microbiology System offers a mix-and-match selection of products to best suit the economic, ergonomic and workflow needs in a busy microbiology laboratory. The collection of complimentary products are targeted for evaluating microbial contamination in aqueous samples using Membrane Filtration (MF) technique. Select the items that best fit the needs in your laboratory. Choose disposable filter funnels and our Sentino Pump or pair the pump with our Sentino Filter Dispenser with individual membrane filters aseptically dispensed at the press of a button. The compact design of the Sentino Microbiology System frees valuable bench top space and provides flexibility in arranging workspace for optimal efficiency and workflow.

Applications

MF Technique for analyzing aqueous samples for microbial contamination:

- Municipal and environmental water analysis
- Water system monitoring
- Beverage monitoring
- Pharmaceutical and personal care products quality control

Accessories

Sentino Microbiology Pump
Maximize workspace and minimize contamination risk

Sentino Filter Dispenser
Offers a simple design with a reliable dispense

MicroFunnel™ Filter Funnels
Widest selection of easy to use, disposable filter funnels for microbiological analysis.

Microcheck® Beverage Monitors
Easy-to-use disposable filter funnel to meet microbial analysis needs for beverages

Sentino Magnetic Filter Funnels
Unique magnetic seal allows easy, one-handed vacuum filtration of liquids

Pall Laboratory Manifold
Most convenient way to filter multiple samples

Ordering Information

Sentino Microbiology Pump

VWR Cat. No.	Pall Part No.	Description	Pkg
10841-650	13186	(1) power transformer (1) power cord with NEMA 5-15P plug (1) European power cord with CEE 7/7 plug (1) UK power cord with BS1363 plug	1/pkg

Sentino Filter Dispenser

VWR Cat. No.	Pall Part No.	Description	Pkg
10147-394	13184	1) power transformer, (1) power cord with NEMA 5-15P plug, (1) European power cord with CEE 7/7 plug, (1) UK power cord with BS1363 plugplug	1/pkg

MicroFunnel™ Filter Funnels, 100 mL

VWR Cat. No.	Pall Part No.	Description	Pkg
28143-544	4800	MicroFunnel unit with 0.45 µm GN-6 Metricel® membrane, white, gridded, individually bagged	50/pkg
28143-542	4803	MicroFunnel unit with 0.2 µm Supor® membrane, white, gridded, individually bagged	50/pkg
97003-750	4852	MicroFunnel unit with 0.45 µm Supor membrane, white, gridded, individually bagged	50/pkg
28143-556	4805	MicroFunnel unit with 0.45 µm Metricel Black membrane, black, gridded, individually bagged	50/pkg

MicroFunnel Filter Funnels, 300 mL

VWR Cat. No.	Pall Part No.	Description	Pkg
28143-560	4815	MicroFunnel 300 unit with 0.45 µm GN-6 Metricel membrane, white, gridded, individually bagged	20/pkg
28143-574	4818	MicroFunnel 300 unit with 0.2 µm Supor membrane, white, gridded, individually bagged	20/pkg
83008-126	4828	MicroFunnel 300 unit with 0.45 µm Supor membrane, white, gridded, individually bagged	20/pkg

MicroFunnel Plus Filter Funnels, 100 mL, Gamma Irradiated

VWR Cat. No.	Pall Part No.	Description	Pkg
28143-582	4809	0.2 µm Supor membrane, white, gridded, individually bagged	50/pkg
28143-588	4823	0.45 µm Supor membrane, white, gridded, individually bagged	50/pkg

Microcheck Beverage Monitors

VWR Cat. No.	Pall Part No.	Description	Pkg
87004-338	4761	GN-6 Metricel membrane, 0.45 µm, white with grid lines, 100 mL capacity	50/box
87004-340	4762	GN-4 Metricel membrane, 0.8 µm, white with grid lines, 100 mL capacity	50/box
87004-342	4763	Metricel Black membrane, 0.45 µm, black with grid lines, 100 mL capacity	50/box
87004-344	4764	Metricel Black membrane, 0.8 µm, black with grid lines, 100 mL capacity	50/box

Sentino Microbiology System *(continued)*

Ordering Information *(continued)*

Sentino Magnetic Filter Funnel

VWR Cat. No.	Pall Part No.	Description	Pkg
30617-184	4271	Filter Funnel Assembly 47mm	150 mL
30617-186	4273	Filter Funnel Assembly 47mm	300 mL

Sentino Filter Funnels

VWR Cat. No.	Pall Part No.	Description	Pkg
10147-760	4870	Sentino Filter Funnels 100 mL	80/case
10147-762	4871	Sentino Filter Funnels 250 mL	100/case

Pall Laboratory Manifold

VWR Cat. No.	Pall Part No.	Description	Pkg
75981-548	4889	Manifold Base, 3 place, 3 Manifold Valves, 1 End Cap, 1 Hose Barb Cap	1/pkg
75981-550	4890	MicroFunnel Adapter	3/pkg
75981-552	4891	Sentino Funnel Adapter	3/pkg
75981-554	4892	Standard Adapter	3/pkg
75981-556	4893	Coupling Device for Manifold	1/pkg
75981-560	4959	Elongated Standard Adapter	3/pkg

Accessories and Replacement Parts

VWR Cat. No.	Pall Part No.	Description	Pkg
75981-546	4878	Spare O-ring Kit	1/pkg
75981-558	4894	Manifold Valves	1/pkg

Stainless Steel Forceps

VWR Cat. No.	Pall Part No.	Description	Pkg
30033-042	51147	Black grips	1/pkg
34181-102	4690	Multi-colored grips	3/pkg

47 mm Magnetic Filter Funnels

VWR Cat. No.	Pall Part No.	Description	Pkg
28143-546	4247	150 mL capacity	1/pkg
28143-550	4242	300 mL capacity	1/pkg
28143-548	4241	300 mL capacity with lid	1/pkg

Notes

PALL Laboratory

Ordering:
vwr.com

3/21, PDF, GN20.0903

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