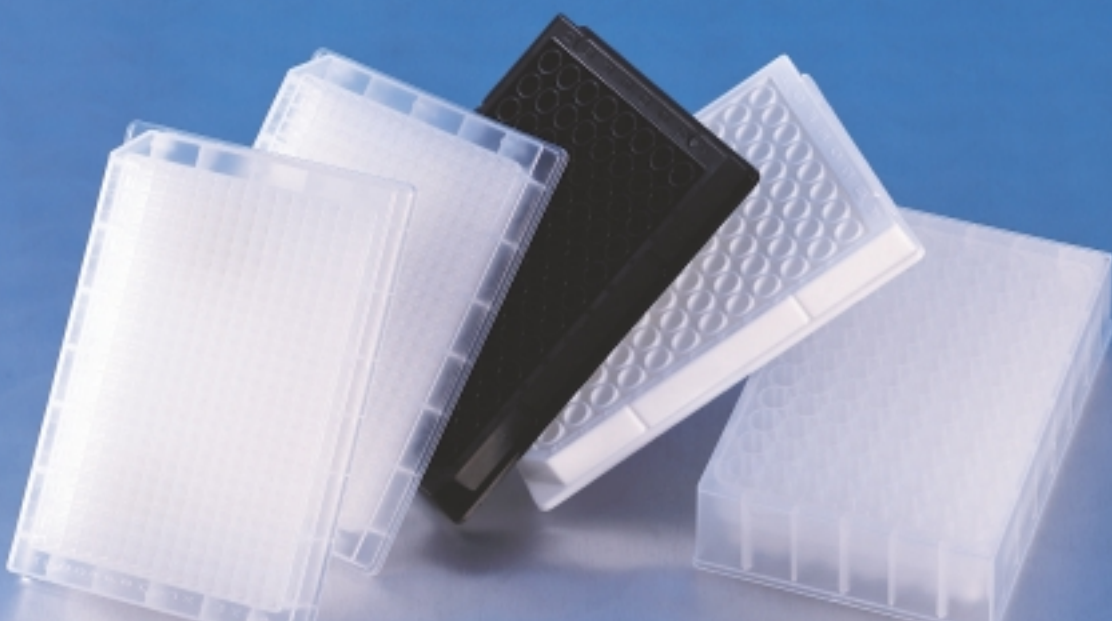




Life Sciences

AcroPrep™ and AcroWell™ Multi-well, Membrane-bottom Plates



Multi-well, Membrane-bottom Plates for High Throughput Sample Preparation and Detection Procedures

- **Reduce crosstalk** – proprietary sealing technology individually seals membrane in each well, reducing well-to-well crosstalk.
- **Add versatility** – available in 96- and 384-well formats. Our portfolio includes a variety of membranes and configurations, plate colors, well volumes, and outlet tip lengths for use in a multitude of sample preparation and detection processes.
- **Assure consistency** – designed in accordance with the standards of the Society for Biomolecular Screening (SBS). Single-piece design strengthens these plates for automated applications.
- **Gain confidence** – the chemically resistant/biologically inert polypropylene housing construction is low protein and nucleic acid binding, and durable when used with harsh chemicals.
- **Make it convenient** – serialized barcode allows for use in automated tracking systems.

Applications

- Sample prep / gross fractionation
- DNA purification
- Receptor:Ligand binding assays
- Prefiltration
- Clarification of cell lysates and tissue homogenates
- Preparation of proteinaceous solutions
- Drug binding studies
- Low protein or nucleic acid binding procedures
- Combinatorial chemistry library screening
- Cleavage assays
- Bead-based assays
- Size exclusion assays
- Concentration, purification and desalting of proteins and nucleic acids
- Molecular synthesis
- ELISA
- ELISPOT

Filtration. Separation. Solution.SM

How To Select the Proper Filter Plate

AcroWell™ or AcroPrep™?

AcroPrep Filter Plate



Membranes are individually cut, placed, and sealed in the wells.

- Plate can be used in both filtrate- and retentate-based applications.
- Plates have either long or short fluid directors to direct the flow of the filtrate without cross-contamination.
- Proprietary sealing process allows flexibility in sealing a wide range of membrane both single and multiple layers.
- Available in a wide range of configurations to meet various application challenges.

AcroWell Filter Plate



Constructed of two membrane layers – the bottom layer of membrane protects the upstream membrane and acts as a barrier to passive flow.

- Designed for use in retentate based applications such as hybridization-based binding assays and time resolved fluorescence.
- Plate and membrane construction allows for extended or elevated-temperature incubations without solution weeping and crosstalk.

Outlet Tip Types

AcroWell 96



Used for retentate-based applications. Not recommended for filtrate collection.

AcroPrep 96



Used for both filtrate- and retentate-based applications. Outlet tips are recessed beneath the skirt of the plate.

AcroPrep 96 1 mL



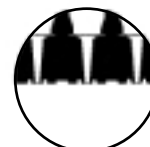
Used for both filtrate- and retentate-based assays. Outlet tips extend beyond the skirt of the plate and pilot into the wells of a receiving plate.

AcroPrep 384 Long Tip



Can be used for both filtrate- and retentate-based applications. Outlet tips extend beyond the skirt of the plate and pilot into the wells of a receiving plate.

AcroPrep 384 Short Tip



Can be used for both filtrate- and retentate-based applications. Outlet tips are recessed beneath the skirt of the plate.

Methodology: Filtration versus Retention



1. Place plate on vacuum manifold or hold the plate so the outlets on the bottom of the plate are not touched.



2. Add sample and incubate. Apply vacuum (or centrifuge).



3A. Release vacuum from the manifold. Remove filter plate and retained sample for further processing.



OR
3B. Release vacuum from the manifold. Remove filter plate. Remove collection (receiver) plate and utilize collected filtrate in downstream applications.

Plate Selection Table

Plate Characteristics	Membrane	Plate Configuration				Product Number	Packaging	Applications by Membrane Type
		Well Vol	Well #	Outlet Tip	Color			
Low BioMolecule Binding	AcroWell™ Filter Plates							GHP Membrane <ul style="list-style-type: none"> Cleavage Reactions Receptor:Ligand Screens Bead-/Resin-based Applications Plasmid Lysate Clearing HPLC Sample Prep and Clarification Metabolic Studies Applications that Use Harsh Organics Combi-chem Library Screens General Sample Prep Time Resolved Fluorescence (TRF) PTFE Membrane <ul style="list-style-type: none"> Molecular Synthesis Drug Synthesis Reactions Bead-/Resin-based Applications Bio-Inert Membrane <ul style="list-style-type: none"> Drug Binding Studies Purification of Oligos from Polyacrylamide Gels General Sample Prep
	GHP, 0.45 µm (hydrophilic polypropylene)	350 µL	96	FB	Natural	5020	10/PK	
	GHP, 0.45 µm (hydrophilic polypropylene)	350 µL	96	FB	White	5021	10/PK	
	AcroPrep™ Filter Plates							
	GHP, 0.45 µm (hydrophilic polypropylene)	350 µL	96	ST	Natural	5030	10/PK	
	GHP, .045 µm (hydrophilic polypropylene)	350 µL	96	ST	White	5043	10/PK	
	GHP, 0.45 µm (hydrophilic polypropylene)	350 µL	96	ST	Black	5044	10/PK	
	GHP, 0.2 µm (hydrophilic polypropylene)	350 µL	96	ST	Natural	5045	10/PK	
	GHP, 0.45 µm (hydrophilic polypropylene)	1 mL	96	LT	Natural	5054	5/PK	
	GHP, 0.2 µm (hydrophilic polypropylene)	1 mL	96	LT	Natural	5052	5/PK	
	GHP, 0.45 µm (hydrophilic polypropylene)	100 µL	384	LT	Natural	5070	10/PK	
	GHP, 0.45 µm (hydrophilic polypropylene)	100 µL	384	ST	Natural	5071	10/PK	
	Bio-Inert®, 0.2 µm (modified nylon)	350 µL	96	ST	Natural	5042	10/PK	
	PTFE, 0.45 µm (w/ polyester support)	350 µL	96	ST	Natural	5038	10/PK	
	PTFE, 0.2 µm (w/ polyester support)	350 µL	96	ST	Natural	5037	10/PK	
	PTFE, 0.45 µm (w/ polyester support)	1 mL	96	LT	Natural	5056	5/PK	
	PTFE, 0.2 µm (w/ polyester support)	1 mL	96	LT	Natural	5055	5/PK	
	High BioMolecule Binding	AcroWell Filter Plates						
BioTrace™ NT, 0.2 µm (nitrocellulose)		350 µL	96	FB	White	5022	10/PK	
BioTrace NT, 0.2 µm (nitrocellulose)		350 µL	96	FB	Black	5025	10/PK	
BioTrace PVDF, 0.45 µm (hydrophobic)		350 µL	96	FB	Natural	5023	10/PK	
BioTrace PVDF, 0.45 µm (hydrophobic)		350 µL	96	FB	Black	5026	10/PK	
BioTrace PVDF, 0.45 µm (hydrophobic)		350 µL	96	FB	White	5027	10/PK	
AcroPrep Filter Plates								
AB glass fiber, 1.0 µm (w/ polypropylene support)		350 µL	96	ST	Natural	5031	10/PK	
AB glass fiber, 1.0 µm (w/ polypropylene support)		350 µL	96	ST	White	5032	10/PK	
AB glass fiber, 1.0 µm (w/ polypropylene support)		1 mL	96	LT	Natural	5051	5/PK	
Prefiltration	AD glass fiber over Bio-Inert (3.0 µm/0.2 µm)	350 µL	96	ST	Natural	5046	10/PK	Glass Fiber over Bio-Inert Membrane <ul style="list-style-type: none"> Clarification of Cell Lysates and Tissue Homogenates Preparation of Proteinaceous Solutions Applications that Require Prefiltration
	AD glass fiber over Bio-Inert (3.0 µm/0.2 µm)	1 mL	96	LT	Natural	5053	5/PK	
Molecular Separation	Omega™ 10K (ultrafiltration)	350 µL	96	ST	Natural	5034	10/PK	Omega Ultrafiltration Membrane <ul style="list-style-type: none"> Size Exclusion Concentrate, Purify, and Desalt Proteins, Peptides, Oligos, DNA, and RNA DNA Clean-up Recover Proteins, Oligos, and RNA from Polyacrylamide Gels
	Omega 30K (ultrafiltration)	350 µL	96	ST	Natural	5035	10/PK	
	Omega 100K (ultrafiltration)	350 µL	96	ST	Natural	5036	10/PK	

Outlet Tip

FB: Flat Bottom (AcroWell Plate)
 ST: Short Tip (AcroPrep Plate)
 LT: Long Tip (AcroPrep Plate)

Housing Colors

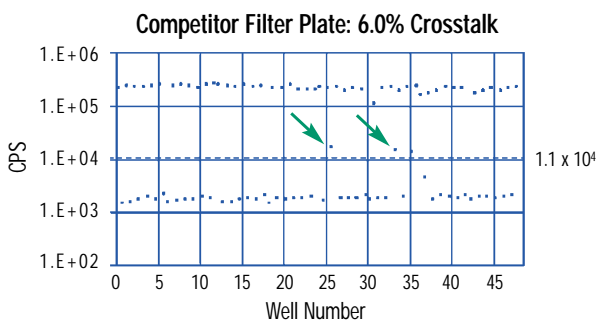
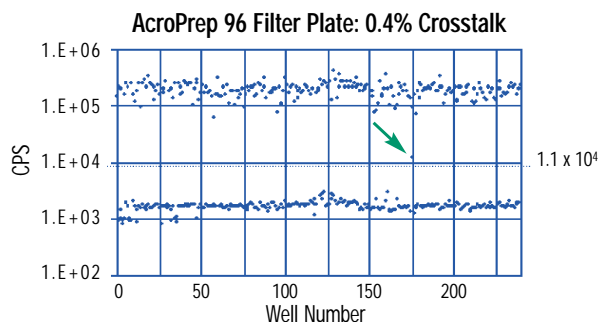
Color	Detection System
White	Radioactivity, Chemiluminescence
Natural	TRF, Fluorescence
Black	TRF, Lowest Background for Fluorescence

For ordering or technical information call your local Pall Life Sciences office listed on the back page.

www.pall.com/lab

Performance

AcroPrep™ 96 filter plates exhibit less crosstalk than competitor plates.



Fluorescein dye (200 μ L of a 2 μ g/mL H_2O stock) was added to wells of AcroPrep 96 plates with GHP membrane (5 plates total) and a competitor plate in a checkerboard pattern. Alternate wells were filled with 200 μ L of water. Fluid was evacuated from wells into a solid bottom receiver plate using vacuum filtration at 30 cm Hg (12 in. Hg) for 15 seconds. Filter plates were carefully removed and receiver plates read in a PerkinElmer, Wallac VICTOR® 1420 Multilabel Counter. Wells filled with water that show a CPS reading above the dashed line (1.1 x 10⁴ CPS, which is = "Average" Background + 5% Signal) constitute a crosstalk event.

CPS = Counts Per Second

References

- Valenzano, K.J., W. Miller, J. Kravitz, P. Samama, D. Fitzpatrick and K. Seeley. 2000. Development of a Fluorescent Ligand-Binding Assay Using the AcroWell Filter Plate, *J. Biomolecular Screening*, 5(6):455-461, PN 33220.
- Tang, N. 2002. Chemiluminescent Detection of Protein Binding, *Genetic Engineering News*, 22(8):34.
- Contact Pall for additional protocols or visit www.pall.com/lab.

Related products available from Pall

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- Vivid™ Microarray Slides
- Membranes for macroarray and blotting applications



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