



## AcroPrep™ 24-well Filter Plates for Cell Clarification and Sterile Filtration

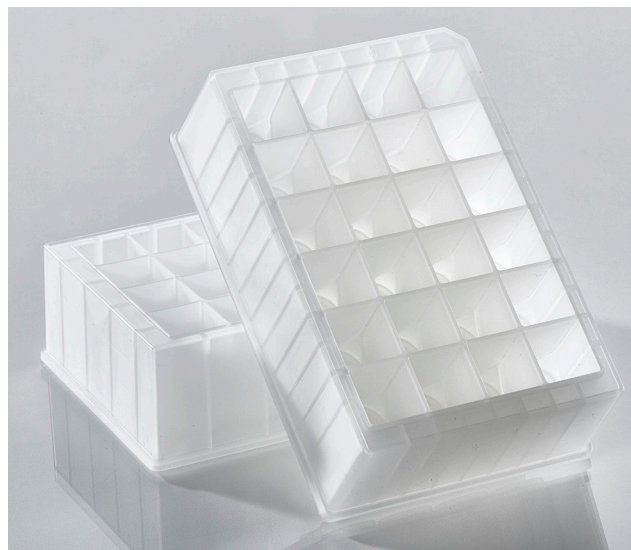
### Description

Pall Laboratory has two 24-well, 7 mL, filter plates for use with protein purification and general sterile filtration workflows. Utilizing Pall's proprietary high-performance multi-layer filter media and membranes, these plates offer time savings, strong performance claims and streamlined workflow improvements in a 24-well plate format. Each filter plate comes with a V-shaped bottom collection plate and lid.

### Protein Purification Workflows with the AcroPrep Cell Clarification and Sterile Filtration Plate

Pall's clarification and sterile filtration AcroPrep 24-well filter plate can both clarify and 0.2 µm sterile filter in a single device and workflow step. With either a vacuum manifold or centrifuge, high density cell cultures (such as CHO or HEK) can be quickly processed resulting in the capture of cells, cell debris and other biological aggregates in the filter media. The filtrate collected by the 24-well collection plate contains proteins and other sub 0.2 µm particles. This innovative workflow is possible by using multi-layer filtration media and membranes integrated into one device. The top layer features Pall's Seitz® depth media and efficiently captures whole cells and cell debris. The lower Supor® EKV layer provides an efficient sterile filtration layer. The combination effortlessly recovers proteins from whole cell cultures with varying viabilities of up to 25M+ cells/mL.

Compared to traditional methods to recover proteins from cell cultures, Pall's cell clarification and sterile filtration plate uses seven times (7x) less plastic consumables by weight, significantly reducing disposal and landfill costs while also saving time and simplifying workflows. Combining the clarification and sterilization steps eliminates the need to harvest the cells in a centrifugation step, saving additional time.



### Sterile Filtration Workflows with the AcroPrep 0.2 µm Supor EKV Filtration Plate

Pall's sterile filtration AcroPrep 24-well filter plate is well suited for high volume (up to 7 mL) plate-based sterile filtration needs such as media, reagent, serum or proteins. Compatible with either a vacuum manifold or centrifuge, the 24-well Supor EKV plate features a dual-layer, 0.65 µm membrane integrated with a highly asymmetric 0.2 µm membrane for fast, efficient, and sterilizing grade filtration.

Both AcroPrep 24-well filter plates use ScaleUp filter materials and membranes which are widely available in other Laboratory filtration products as well as in GMP grade production devices. This can simplify scale up or technology transfer when moving from research to process development.

### Applications

- Clone selection and clone candidate analysis
- Cell expansion studies
- Recombinant protein isolation prior to analysis
- Cell clarification
- Process optimization
- Sterile filtration

## AcroPrep 24-Well Plate Features

- Gamma irradiated
- Receiver plate and lid are included
- Individually bagged for ease-of-use
- Intrinsic plate and membrane properties minimize sample loss from non-specific binding
- Automation friendly – compatible with all major automation platforms
- Designed in accordance with the ANSI/SLAS X-2004 standards
- Vacuum compatible – Compatible with all popular vacuum and positive pressure manifolds
- Centrifugation - Suitable for centrifugation with compatible rotors

### Clarification and sterile filtration plate

- Depth filter plus 0.65/0.2 µm Supor EKV membrane
- Demonstrates retention of 10<sup>7</sup> cfu/cm<sup>2</sup> of *B. diminuta* per modified ASTM F838
- Depth media allows clarification of large cellular debris prior to filtration through the 0.65/0.2 µm Supor EKV membrane
- Reliable recovery of > 95% of extra cellular proteins

### Sterile filtration plate

- 0.65/0.2 µm Supor EKV dual-layer membrane
- Sterilizing grade plate, Demonstrates retention of 10<sup>7</sup> cfu/cm<sup>2</sup> of *B. diminuta* per modified ASTM F838
- Designed for applications where a sterile filtrate is required

## Specifications

### Materials of Construction

#### Filter Media

Seitz Depth Media  
Supor EKV (Hydrophilic polyethersulfone membrane)

#### Plate Housing

Polypropylene

#### Lid

Polystyrene

### Recommended Working Volume (Max)

7 mL for vacuum  
6 mL for centrifugation

### Recommended Operating Vacuum

≥ 25.4 cm Hg (10 in Hg)

### Dimensions

Length: 12.8 cm (5.0 in)  
Width: 8.6 cm (3.4 in)  
Height (With receiver plate): 7.5 cm (2.97 in)  
Height (Without receiver plate): 3.9 cm (1.5 in)  
Well-Bottom Area: 1.6 cm<sup>2</sup> (0.24 in<sup>2</sup>)

### Recommended Centrifugal Force

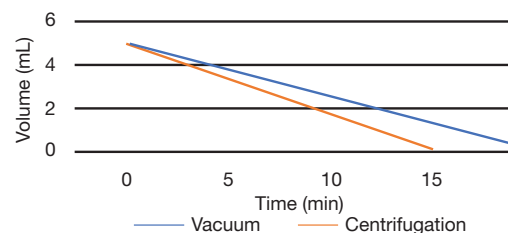
1,000 x g

### Typical Hold-Up Volume

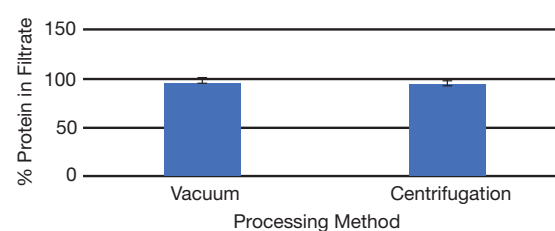
450 µL per well

## Performance of Clarification and Sterile Filtration Plate

Evaluation of time to process 5 mL of CHO cells with a density of 25 M cells/mL; Vacuum filtration performed at 15 in Hg; Centrifugation performed at 1,000g



Protein recovery from high-density CHO cells cultures after being through a 24-well plate (Depth + EKV media); 5 mL of CHO cells at a density of 25 M cells/mL



## Ordering Information

Part Number	Description	Pkg
97026	AcroPrep 24-well Clarification and Sterile Filtration plate	8/pkg
97016	AcroPrep 24-well Clarification and Sterile Filtration plate	2/pkg
97027	AcroPrep 24-well Sterile Filtration Plate	8/pkg
97017	AcroPrep 24-well Sterile Filtration Plate	2/pkg



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