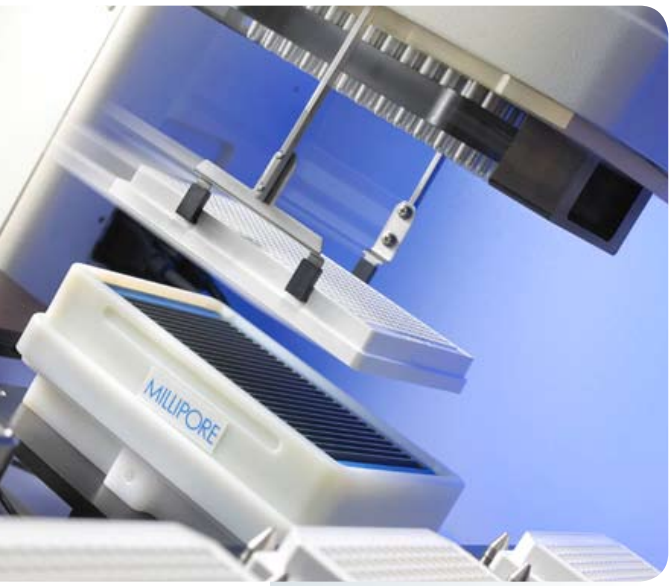
MILLIPORE



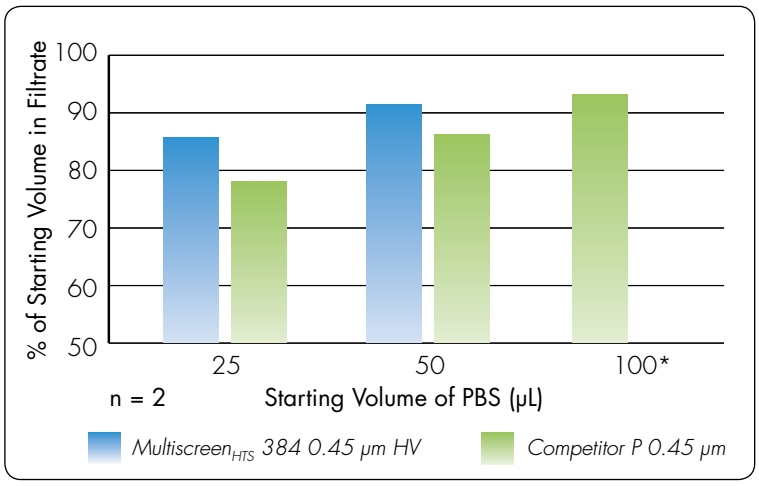
MultiScreen® HTS

384 Hydrophilic PVDF Filter Plates

384-well plates incorporate optimized hydrophilic PVDF membrane for high throughput sample preparation

- Durapore® HV membrane offers low protein binding combined with high flow
- New offset spout design improves filtration collection performance with no filtrate cross-talk
- Compatible with existing MultiScreen™ HTS vacuum manifold and its DirectStack™ technology

High Sample Recovery and Broad Working Range



*Exceeds Competitor P plate recommended working volume

Most Reliable Tool for High Throughput Sample Preparation

High-throughput screening technologies are increasingly common in today's laboratories. To maximize productivity and avoid being limited by the rate of efficient sample preparation, high-throughput sample preparation methods are required. The fully automation-compatible MultiScreen$_{HTS}$ 384-well plate is a high density, optimized platform that prepares large numbers of samples for subsequent analysis. MultiScreen$_{HTS}$ 384 plates contain Durapore hydrophilic PVDF membranes, known to offer the highest flow rates combined with the lowest protein binding on the market.

The MultiScreen$_{HTS}$ 384 plate is compatible with 384-well receiver plates for the collection and analysis of filtered samples. In addition, these filter plates are designed to permit in-plate incubations of aqueous samples, thereby eliminating the need to perform assays in a separate plate prior to transferring the sample to the filter plate.

The Multiscreen$_{HTS}$ 384 filter plate demonstrates a broader working range and better recovery than the Competitor P plate, especially with small samples. To obtain these results, 100% PBS was vacuumed at moderate vacuum level in DirectStack mode for 60 seconds. Plates were manually measured for volume.

Innovative Plate Design

The innovative design of the MultiScreen$_{HTS}$ 384 plates eliminates the cross-talk and messy transfers that can occur with competitive plates. The new spout design of the MultiScreen$_{HTS}$ 384 plates improves filtrate collection performance by positioning the spout next to the inside wall of each collection plate well, discouraging hanging droplets. As filtration proceeds, each drop easily slides down from the spout to the well wall and into the bottom of each well.

With fewer droplets hanging onto the filter plate, less mess occurs when transporting the plate or transferring samples and recovery is maximized. A plastic skirt improves the vacuum seal when used with a Millipore$_{HTS}$ vacuum manifold (Millipore Cat. No. MSVM HTS 00). The Millipore$_{HTS}$ vacuum manifold incorporates DirectStack technology so that the filter plate sits directly on top of the collection plate, another design element that prevents cross-contamination.

MultiScreen$_{HTS}$ filter plates are fully compatible with automation and meet the 2004 ANSI/SBS standards for multiwell plates. The new HTS design for these 384-well plates features rigid sidewalls aligned for robotic gripper arms. They also provide ample surfaces for bar code labels. Using 384-well plates reduces costs when compared to using four individual 96-well plates.

Highly Efficient Scintillation Counting

Other uses for the MultiScreen$_{HTS}$ 384 plate include radiometric assays. The opaque plate with its clear underdrain is ideal for measuring radioactivity. Scintillation counting can be performed directly in the plate from the top (top counting), or from both sides simultaneously (coincidence counting).

Uniform Recovery

Starting Vol.	Filtrate Vol. CV%	
	Multiscreen$_{HTS}$ 384	Competitor P 384
25	7%	14%
50	4%	7%
100*	4%	N/A

**Exceeds Competitor P plate recommended working volume*

Specifications

Materials of construction:

Base plate:	Styrene Acrylonitrile (SAN); top: white; bottom: clear
Plate lid:	Polystyrene
Membrane:	0.45 µm (HV) hydrophilic Durapore PVDF

Dimensions:

Plate assembly length:	127.8 mm
Plate assembly width:	85.5 mm
Plate assembly depth (without lid):	14.4 mm
Plate assembly depth (with lid):	16.9 mm
Approximate filter surface area:	0.09 cm^2
Well depth approx.:	10.9 mm

Sample volume per well

Recommended:	20–100 µL
Recommended vacuum pressure:	12" Hg
Recommended centrifugal force:	500–1000 × g

Ordering Information

Description	Qty/Pk.	Catalogue No.
MultiScreenHTS 384 HV q	10	MZHV N0W 10
filter plates, 0.45 µm	50	MZHV N0W 50

Accessories

MultiScreen$_{HTS}$ Vacuum Manifold	1	MSVM HTS 00
Chemical duty vacuum pump		
115 Volts, 60 Hz	1	WP61 115 60
220 Volts, 50 Hz	1	WP61 220 50
Plate sealing tape		
Clear	100	MATA HCL 00
Opaque	100	MATA H0P 00
Vacuum flask, 1 L	1	XX10 047 05

Related Information

MM014: Guidelines for BioAssays on MultiScreen Filter Plates

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