

The FilterMate Universal Harvester

Simple simultaneous harvesting of samples from 96- and 24-well microplates

Harvesting cells is fast and easy with PerkinElmer's FilterMate™ Universal Harvester. Our compact system harvests and washes all 96 or 24 samples simultaneously from shallow- or deep-well microplates.

The FilterMate Harvester is available in several versatile configurations. There are FilterMate models suited for either our MicroBeta® or TopCount® Scintillation and Luminescence Counters, as well as a model designed for cutting filtermats for our Tri-Carb® Liquid Scintillation Counters or WIZARD® Automatic Gamma Counters.

With any FilterMate model, it takes only minutes to process and transfer samples—onto integrated filter plates such as UniFilter® plates for counting on TopCount; onto dedicated filtermats for counting on MicroBeta; or onto plain filtermats with the OmniFilter™ harvester configuration. With the OmniFilter FilterMate, you can leave filtermats intact and count them on a TopCount, or cut them into individual filter disks and transfer them easily into individual gamma or liquid scintillation counting vials for counting on a WIZARD or Tri-Carb.

The UniFilter and MicroBeta FilterMate Harvesters are available in stainless steel to provide increased resistance to TCA (trichloroacetic acid).

Key Features

- **Flexible**—use 96- or 24-well formats, deep- or shallow-well plates.
- **Short fluid path**—minimizes the amount of wash fluid required and ensures more complete washing.



UniFilter FilterMate Harvester

- **Separate hot and cold waste lines**—helps minimize radioactive waste.
- **Versatile base-unit**—enables switching from 96- to 24-well format and back in just a few minutes.
- **Built-in scrubbers**—make it easy to detach adherent cells from well bottoms and ensure complete harvesting.

Key Applications

- Cell proliferation assays (tritiated thymidine uptake)
- Cytotoxicity assays
- Receptor binding assays
- Nucleic acid degradation
- Trichloroacetic acid preparations
- Cell wash station for adherent cell assays

Choose the FilterMate Model Suited for Your PerkinElmer Counter

Order a FilterMate Harvester set-up for the filter plates or filtermats best suited for your PerkinElmer microplate, LSC or gamma counter. Any FilterMate is easily adapted to handle the alternative microplate size—96- or 24-wells.

UniFilter Harvester—Ideal for TopCount Users

This FilterMate Harvester is configured for harvesting UniFilter plates for analysis on the TopCount Microplate Scintillation and Luminescence Counters. UniFilters are 96- or 24-well microplates with built-in GF/B® or GF/C® filters for optimized harvesting of membrane receptors or cells. Harvesting and washing steps are performed 96 wells at a time using the simple, push button aspiration and wash control. The UniFilter plates go into the TopCount for analysis of up to 12 wells simultaneously. Should your assays require the larger size 24-well plate for higher sample loads, you can easily convert the FilterMate to the UniFilter-24 configuration. Simply remove four screws to replace the upper head and the wash/aspirate head. In this format, millions of cells or milligrams of membrane protein may be harvested.

Filtermat Harvester—Best for MicroBeta Users

This FilterMate Harvester is configured for harvesting onto MicroBeta filtermats for counting with the MicroBeta Liquid Scintillation and Luminescence Counter. MicroBeta filtermats are available in 96- and 24-well formats in a variety of materials. The upper and lower wash aspirate heads are specially designed to ensure proper alignment of the filter material without guessing. The FilterMate Harvester can be configured for MicroBeta at the factory or in your laboratory with an easy-to-use conversion kit. With the FilterMate Harvester, switching between a UniFilter application to a MicroBeta filtermat is easy. The choice is yours.

OmniFilter Harvester—Perfect for counting custom filtermats on TopCount, Tri-Carb and WIZARD Counters

The FilterMate Harvester is also available for OmniFilter 96-well applications. This configuration also allows the harvester to be used for most filtermats. An OmniFilter is a special plate assembly that is designed to hold and properly position the filtermat for counting on a TopCount.

Additionally, the harvester can be adjusted so that all 96 sample areas on the filtermat are cut into separate disks. This allows the easy removal of each disk into vials or test tubes for liquid scintillation or gamma counting. Since the microplate format is maintained during harvesting, there is less chance of sample mix-up during the transfer.

Designed for Performance and Ease-of Use Harvester Design Delivers Consistent Harvesting and Washing

Whether your samples are harvested from flat or round bottom plates, shallow- or deep-well tubes, the harvest conditions will be the same for each well.

- Direct sample transfer from the assay plate to the filter through the straight, stainless steel aspiration tubes reduces harvesting time, minimizes sample sticking, lessens the possibility of sample dissociation and eliminates sample carry-over.
- Concentric, positive positioning design of the FilterMate wash/aspirate tubes provides consistent, reproducible harvesting.
- Simultaneous harvesting of each well means that assay reactions are stopped at the same time.
- Well-to-well uniformity of wash buffer volumes further improves assay results.
- Optional pressurized wash system eliminates the dependence on hydrostatic pressure to deliver wash buffers.
- Stainless steel UniFilter-96 and MicroBeta Harvester models are available for acid resistance to prevent corrosion of the harvester heads.





FilterMate For MicroBeta

Filter Head Design Prevents Sample Crossover

Harvesting 96 or 24 samples in a small area creates the potential for samples to migrate on the filter during harvesting. During counting, this can cause erroneous results because of the unpredictable migration of activity between sample areas. Regardless of the configuration or the method of analysis, the FilterMate is designed to give accurate results for the most demanding assays.

- When harvesting onto filter sheets or MicroBeta filtermats, the force of the FilterMate O-rings against the stainless steel support plate prevents any sample crossover.
- When the FilterMate is adjusted to automatically cut the filter into disks, there is no path for liquid flow between samples.
- Additionally, UniFilter plates are designed so that the filter in each well is completely isolated from neighboring wells. This prevents any possible crossover of sample during harvesting or counting.

Three Push Buttons Let You Control All the Harvesting Steps

Three push buttons for vacuum and wash put you in complete control of all harvesting steps. Use one vacuum control button to collect the filtrate into a “hot” waste container. Another allows you to segregate and collect subsequent washes into a “cold” waste container, reducing waste disposal costs. You can set the vacuum to stay on continuously so washing and aspiration steps are carried out simultaneously. Since you control the wash buffer, potential overflow is eliminated. And FilterMate’s short fluid path overcomes problems of dissociation, clogging, and contamination.

Microplate Format Makes Sample Identification Easy

The FilterMate maintains the same microplate format as your experimental protocol, whether it is a 96-well format or the larger area 24-well format. This prevents individual sample filter disks from being mixed-up when transferring them to vials for LSC or gamma counting. When using UniFilters or filter paper, sample mix-ups are also eliminated since all samples are harvested onto a single filter.

FilterMate Harvester and Accessories Ordering Information

Cat. No.	Description
D961241	Filtermat-24 Harvester for MicroBeta
D961962	Filtermat-96 Harvester for MicroBeta
C961960	OmniFilter-96 Harvester for TopCount OmniFilter Applications or Cutting Filters for Tri-Carb or WIZARD Counting
C961241	UniFilter-24 Harvester for TopCount
C961961	UniFilter-96 Harvester for TopCount
C961962	UniFilter-96 Harvester for TopCount, Stainless Steel
7601415	Converter Kit for MicroBeta Filtermat, 96
7601414	Converter Kit for MicroBeta Filtermat, 24
5074549	24-well Wash/Aspirate Head Assembly
5074276	96-well Wash/Aspirate Head Assembly
1694119	FilterMate Operation Manual
7601297	Harvester Frame
6005420	OmniFilter Die, Cutting Die for Making Filters Fit into the OmniFilter Plate
7601197	OmniFilter Plate, with Handle

Cat. No.	Description
6005226	OmniFilter Template, Cutting Template to Fit Filters into OmniFilter Plate
7601410	OmniFilter Upper Head
7601370	Replacement Waste Bottle Kit (Does Not Include Tubing)
7601412	UniFilter-24 Upper Head
7601411	UniFilter-96 Upper Head
7601365	Pressurized Wash Bottle Stand
7601369	Wash Bottle & Tubing Kit for Pressurized Washing (required with 7601365)
7601366	Waste Bottle & Tubing Kit (one included with Basic FilterMate Harvester)
7601299	Waste Bottle Stand
7001029	Harvester Maintenance Kit
700831	Vacuum Pump Kit 110V
700832	Vacuum Pump Kit 220V

For additional complementary products, including filters, microplates and cocktails please visit www.perkinelmer.com/harvester.

Choose PerkinElmer's FilterMate Harvester for fast and convenient cell harvesting. Call 1-800-762-4000 or visit www.perkinelmer.com/las today to place your order. To locate your local sales office, visit www.perkinelmer.com/lasoffices.

PerkinElmer Life and
Analytical Sciences
710 Bridgeport Avenue
Shelton, CT 06484-4794 USA
Phone: (800) 762-4000 or
(+1) 203-925-4602
www.perkinelmer.com



For a complete listing of our global offices, visit www.perkinelmer.com/lasoffices

©2005 PerkinElmer, Inc. All rights reserved. The PerkinElmer logo and design are registered trademarks of PerkinElmer, Inc. FilterMate, TopCount and OmniFilter are trademarks and MicroBeta, Tri-Carb and WIZARD are registered trademarks of PerkinElmer, Inc. or its subsidiaries, in the United States and other countries. GF/B, GF/C and UniFilter are registered trademarks of Whatman Group, Inc. All other trademarks not owned by PerkinElmer, Inc. or its subsidiaries that are depicted herein are the property of their respective owners. PerkinElmer reserves the right to change this document at any time without notice and disclaims liability for editorial, pictorial or typographical errors.