Fast Micro Equilibrium Dialyzer

(25 to 1,500 µl Sample Volume)

Quick Start Guide



a brand of Harvard Bioscience, Inc.



Instructions

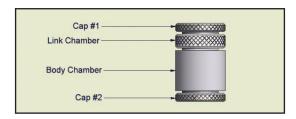
- 1. Place membrane between the two chambers.
- 2. Seal membrane between chambers by tightly screwing together.



Description

The Fast Micro Equilibrium Dialyzer is a unique equilibrium dialysis chamber ideally suited for binding assays. This dialyzer uses membranes and chambers with high surface area to sample volume ratios. The large membrane surface to volume ratio allows for decreased dialysis times (faster equilibrium). The inert PTFE material allows for maximum sample retention, and allows the dialyzer unit to be autoclaved for reuse.

Each dialyzer includes a body chamber and link chamber of equal volume, and two solid caps. A membrane (purchased separately) is placed between the link chamber and the body chamber prior to use.



In binding studies, one chamber contains a macromolecule while the other holds the ligand. The macromolecule is too large to cross the membrane and remains in its chamber. The ligand freely passes through the membrane to bind with the protein. Once complexed, it is too large and is retained by the membrane. When equilibrium has been reached, the chambers are opened at each end to extract the samples for analysis, e.g binding affinity. The dialyzer assembly can be rotated along the membrane axis from time to time and can also be placed in a thermostat for temperature-controlled dialysis.

- 3. Place sample into Link Chamber.
- 4. Seal chamber by tightening Cap #1.



- 5. Invert and place buffer into body chamber.
- Seal chamber by tightening Cap #2.



- 7. Gently agitate until equilibrium is reached.
- 8. Once equilibrium is reached, unscrew cap to retrieve sample.

Note: Wash dialyzer parts before each use.

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Ordering Information

Fast Micro Equilibrium Dialyzers and Membranes								
Chamber Volume	25 μΙ	50 μl	100 μΙ	250 μΙ	500 μΙ	1,000 μΙ	1,500 μΙ	
Fast Micro Equilibrium Dialyzers								
Qty. of 1	7416-251D	7416-501D	7416-1001D	7416-2501D	7416-5001D	7416-10001D	7416-15001D	
Qty. of 5	7416-255D	7416-505D	7416-1005D	7416-2505D	7416-5005D	7416-10005D	7416-15005D	
Additional Link Chambers								
Qty. of 1	7416-251L	7416-501L	7416-1001L	7416-2501L	7416-5001L	7416-10001L	7416-15001L	
Qty. of 5	7416-255L	7416-505L	7416-1005L	7416-2505L	7416-5005L	7416-10005L	7416-15005L	
Additional End Caps, Solid								
Qty. of 2	74-1108			74-1099				

Membranes Packages of 25							
Chamber Volume	25 to 100 μl	250 to 1,500 μl					
Regenerated Cellulose Membranes							
1 kDa	7416-RC1K	7415-RC					
2 kDa	7416-RC2K	7415-RC					
3.5 kDa	7416-RC3.5K	7415-RC3.5K					
10 kDa	7416-RC10K	7415-RC					
25 kDa	7416-RC25K	7415-RC					
50 kDa	7416-RC50K	7415-RC					
Cellulose Acetate Membranes							
500 Da	7416-CA500	7415-CA500					
1 kDa	7416-CA1K	7415-CA1K					
2 kDa	7416-CA2K	7415-CA2K					
5 kDa	7416-CA5K	7415-CA5K					
10 kDa	7416-CA10K	7415-CA10K					
25 kDa	7416-CA25K	7415-CA25K					
50 kDa	7416-CA50K	7415-CA50K					
100 kDa	7416-CA100K	7415-CA100K					
300 kDa	7416-CA300K	7415-CA300K					
Polycarbonate Membranes							
0.01 µm	7416-PC01	7415-PC01					
0.05 μm	7416-PC05	7415-PC05					
0.10 μm	7416-PC10	7415-PC10					
0.60 µm	7416-PC60	7415-PC60					

Notes: Membranes are supplied either as dry or in 0.05% sodium azide solution. They are ready to use after rinsing with deionized water and buffer.

Regenerated Cellulose membranes are more stable in organic solvents, but the MWCO range is not as sharply defined as that of Cellulose Acetate membranes.

Cellulose Acetate membranes have a sharp MWCO range. They are intended only for aqueous solutions, and the presence of an organic solvent is not recommended.

Polycarbonate membranes are more stable in organic solvents. They are available in four highly controlled pore sizes for a well-defined MWCO range.