

Fast Micro Equilibrium Dialyzer

(25 to 1,500 μ l Sample Volume)



a brand of Harvard Bioscience, Inc.

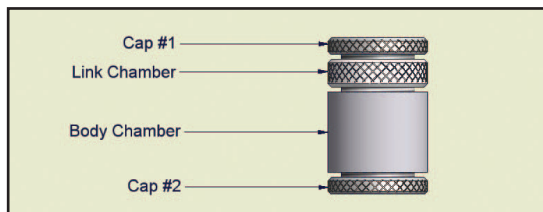
Quick Start Guide



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.

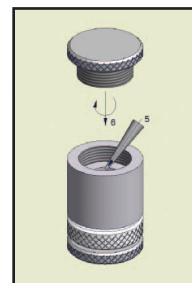
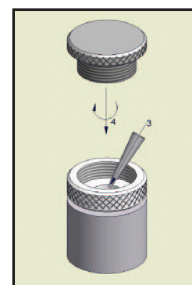
Each dialyzer includes a body chamber and link chamber of equal volume, and two solid caps. A membrane (purchased separately) is placed between the link chamber and the body chamber prior to use.



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.

Instructions

1. Place membrane between the two chambers.
2. Seal membrane between chambers by tightly screwing together.
3. Place sample into Link Chamber.
4. Seal chamber by tightening Cap #1.
5. Invert and place buffer into body chamber.
6. 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.

Ordering Information

| Fast Micro Equilibrium Dialyzers and Membranes | | | | | | | |
|--|------------|------------|-------------|-------------|-------------|---------------|---------------|
| Chamber Volume | 25 μ l | 50 μ l | 100 μ l | 250 μ l | 500 μ l | 1,000 μ l | 1,500 μ l |
| 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 μ l | 250 to 1,500 μ l |
| 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 μ m | 7416-PC01 | 7415-PC01 |
| 0.05 μ m | 7416-PC05 | 7415-PC05 |
| 0.10 μ m | 7416-PC10 | 7415-PC10 |
| 0.60 μ m | 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.