

Introduction to DIALYZERS

Harvard Apparatus DIALYZER Family

REUSABLE DIALYZERS

DIALYZER™

For routine dialysis of volumes from 10 μ l to 5 ml, see page N26.

Fast DIALYZER™

Routine dialysis at higher speeds due to an additional dialysis port, see page N27.

SpinDIALYZER™ and Fast SpinDIALYZER™

These are our DIALYZER and Fast DIALYZER with an internal magnet that allows the entire unit to rotate on a magnetic stirrer for even faster dialysis, see page N28.

ElectroPrep™

The ElectroPrep is an electrophoresis based dialysis system. It can be configured for a number of applications including the elution of biomolecules from gels as well as sample concentration. Flow-Thru ElectroPrep™ (pat) is used with the single or multi Fast DIALYZER system for ultra-fast pumping, see pages N29 to N31.

Flow-Thru Macro DIALYZER™

Used with the ElectroPrep system supporting continuous online sample detection, see page N32.

Flow-Thru DIALYZER™

Larger Membrane for rapid dialysis of volumes up to 10 ml, see page N33.

DISPOSABLE DIALYZERS

Ultra-Micro DispoDIALYZER™

Disposable, single use DIALYZERS for sample sizes from 1 μ l to 5 μ l, see page N34.

Micro DispoDIALYZER™

Disposable, single use DIALYZERS for sample sizes from 5 μ l to 100 μ l, see page N35.

Macro Fast DispoDIALYZER™

Disposable, single use DIALYZERS for sample sizes from 1 ml to 10 ml, see page N36.

96-Well DispoDIALYZER™

Disposable, single use DIALYZERS that utilize a 96-well format for high throughput applications and are for samples sizes from 25 μ l to 300 μ l, see page N37.

EQUILIBRIUM DIALYZERS

Multi-Equilibrium DIALYZER™ - Reusable

For simultaneous and highly reproducible equilibrium dialysis of up to 20 samples with volumes up to 5 ml, see page N39.

Micro-Equilibrium DIALYZER™ - Reusable

The Micro-Equilibrium DIALYZER is available as 2- or 3-chamber systems. It is used to study interactions between biomolecules such as the binding of a ligand to a protein, see page N40.

Fast Micro-Equilibrium DIALYZER - Reusable

A reusable Micro-Equilibrium DIALYZER suitable for 25 μ l samples for quicker equilibration times using membranes with larger surface areas, see page N41.

DispoEquilibrium DIALYZER™ - Single Use

A disposable version of the Micro-Equilibrium DIALYZER suitable for samples up to 75 μ l, see page N41.

96-Well Equilibrium DIALYZER™ - Single Use

A 96-well disposable equilibrium DIALYZER for high throughput interaction studies. Suitable for samples up to 200 μ l, see page N42.

Dialysis is a physical separation method in which small molecules pass through the pores of a selective membrane while larger molecules are retained in the dialysis chamber. Our DIALYZER portfolio is a unique family of products for the dialysis of small sample volumes of proteins, peptides, nucleic acids, and other biomolecules. The system is suited for sample volumes from 10 μ l to 10 ml or higher. The DIALYZER family consists of over 50 different components that can be joined together to create hundreds of combinations for various applications.

Advantages:

- Easy to use
- Leak-proof
- Low protein binding
- High sample recovery
- Rapid dialysis/purification

Applications:

- Exchange of buffers
- Equilibrium dialysis
- Protein binding assays
- Removal of detergents
- Concentration of samples
- Sample prep for HPLC, HPCE
- Electro-concentration
- Immunoblotting
- Purification of proteins, DNA/RNA
- Electrophoresis, electro-elution, electro-dialysis
- Removal of excess radiolabel or PCR-primers
- GC, GC-MS, NMR
- Elution of proteins and nucleic acids from gels
- Removal of CsCl, agarose, pyridoxal-5-phosphate
- Removal of silicates after chromatography
- Complex carbohydrate purification
- On-Line concentration, on-line dialysis, dynamic dialysis
- Serum protein binding
- Protein, receptor, and ligand binding assays
- Protein-drug binding assays
- Protein-protein interactions
- Protein-DNA interactions