

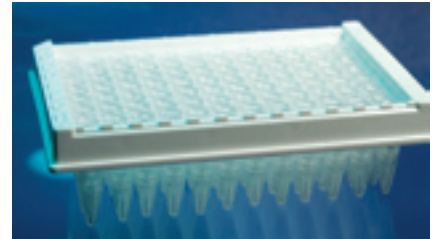
High throughput dialysis of 96 samples

D-Tube96™ Dialyzers allow convenient, high throughput dialysis of 96 samples simultaneously. The device features the advantages of the D-Tube™ Dialyzer Mini in a 96-tube format. D-Tube Dialyzers are easy to handle tubes with dual membranes providing a large surface area for fast, efficient dialysis. The membrane is ultra clean, EDTA-treated, regenerated cellulose that is sulfur- and heavy metal-free, and available with 6-8 kDa or 12-14 kDa molecular weight cutoffs (MWCO). Each D-Tube Dialyzer Mini has a capacity of 10-250 µl, which is ideal for small samples, and can be used to dialyze proteins, oligonucleotides, DNA, and RNA. Samples are added and removed using a standard laboratory pipet, multichannel pipet, or by robotic dispensing. Each kit includes a floating rack containing 96 individual D-Tube Dialyzers Mini, an adhesive aluminum plate sealer, and 96 caps for storage of unused tubes. If fewer than 96 tubes are needed, excess tubes can be removed from the modular device and used at another time. After screening for optimal

refolding conditions with the iFOLD™ Protein Refolding Systems, D-Tube96 Dialyzers provide convenient buffer exchange for the 96 protein samples into a physiologically relevant buffer.

Features

- Efficient dialysis – dual membrane surface with 6-8 kDa or 12-14 kDa MWCO
- Ideal for small sample volume dialysis – capacity 10-250 µl
- Convenient – use single or multichannel pipet, or robotic dispensing
- High sample recovery, >97%
- Protease-, RNase-, and DNase-free
- Versatile – dialyze proteins, oligonucleotides, RNA, or DNA
- High throughput buffer exchange of 96 protein samples into a physiologically relevant buffer after refolding screen with the iFOLD Protein Refolding Systems ■



Product	Size	Cat. No.	Price
D-Tube96™ Dialyzer, 6-8 kDa	96 D-Tubes	71712-3	\$340
D-Tube96™ Dialyzer, 12-14 kDa	96 D-Tubes	71713-3	\$340
D-Tube™ Dialyzer Mini, MWCO 6-8 kDa	1 kit	71504-3	\$49
D-Tube™ Dialyzer Mini, MWCO 12-14 kDa	1 kit	71505-3	\$49
D-Tube™ Dialyzer Midi, MWCO 3.5 kDa	1 kit	71506-3	\$75
D-Tube™ Dialyzer Midi, MWCO 6-8 kDa	1 kit	71507-3	\$75
D-Tube™ Dialyzer Maxi, MWCO 3.5 kDa	1 kit	71508-3	\$92
D-Tube™ Dialyzer Maxi, MWCO 6-8 kDa	1 kit	71509-3	\$92
D-Tube™ Dialyzer Maxi, MWCO 12-14 kDa	1 kit	71510-3	\$92
D-Tube™ Electroelution Accessory Kit	1 kit	71511-3	\$47

Note: Dialyzer kit contains 10 D-Tube Dialyzers and 1 floating rack that holds up to 4 dialyzers

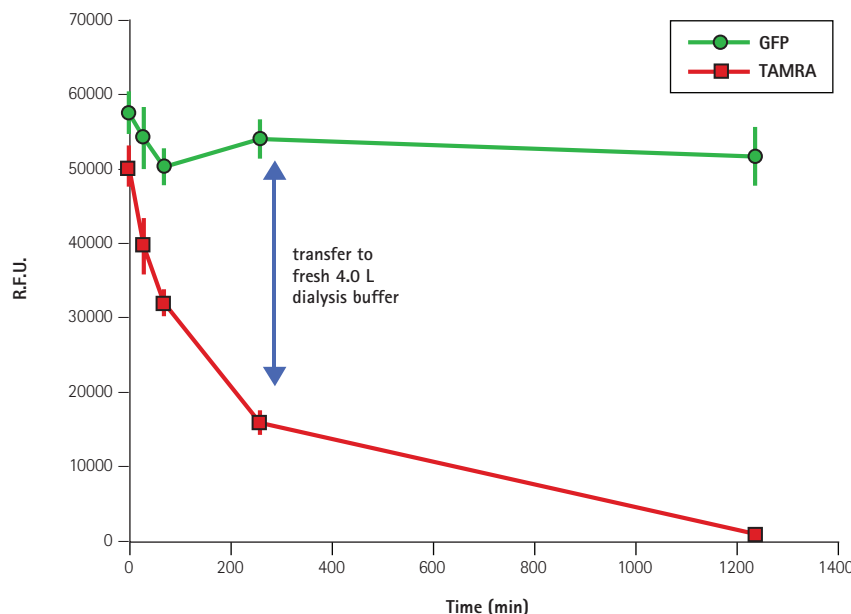


Figure 1. Dialysis efficiency of D-Tube96 Dialyzers

The efficiency of each tube in a D-Tube96 Dialyzer, 6-8 kDa was tested by combining 0.4 mg/ml trx-GFP fusion protein and 40 µM TAMRA™ fluorescent dye in 50 mM Tris-HCl, pH 8.0, 100 mM NaCl and adding 150 µl to each tube of the D-Tube96 device. Samples were dialyzed against 4.0 L 50 mM Tris-HCl, pH 8.0 at room temperature for 4 h. Buffer was changed and dialysis was continued in 4.0 L 50 mM Tris-HCl, pH 8.0 at room temperature overnight. At specified time intervals, 10-µl samples were removed from each of the 96 tubes, added to 190 µl Tris-HCl, NaCl buffer in a black 96-well plate. Fluorescence was read for GFP at 390 nm excitation, 510 nm emission, and for TAMRA at 544 nm excitation, 590 nm emission. The relative fluorescence units (RFU) for all tubes at a time point were averaged and graphed. The low standard deviations at each time point indicate that all tubes exchanged at approximately the same rate. GFP signal is retained in all wells indicating that the dialysis membranes remain intact.