







Interchim Innovations

Interbiotech - BioScience Innovations

Dialysis Overview ([click](#) for detailed presentations; see [applications selection guide](#))

Products	Volume (ml)	Membranes ; MWCO	Features & description
	0.01 0.1 1 10	100Da 1K 10K 100K	
1/ Devices : dialysis of small samples			
FloatALyzers 	(3sizes). 0.1-0.5mL 0.5-1ml 2-5mL 5-10 ml	(9 MWCO) 100Da to 1000KDa 100Da to 100KDa CE (cellulose ester)	<i>Convenient ready-to-use dialysis devices for small volumes: largest range of sizes and MWCO; wet membrane (no soaking); color-code; easy loading with provided pipette (no syringe), and floating (no need for accessory floats)</i>
GebaFlex 	(4/7sizes). 10-250 µl 50-800µl 100µl-3ml 3-20ml	(6 MWCO) 1KDa to 50KDa RC (regenerated cellulose)	<i>Economic and versatile dialysis and electroelution devices</i> Largest range of volumes
Slide-A-Lyzer 	(4sizes) 100-300 µl 0.5-3ml 3-12ml 12-30ml	(4 MWCO) 3.5KDa to 20KDa (4 MWCO) RC (regenerated cellulose)	<i>Convenient ready-to-use dialysis device</i> Easy sample loading with a syringe. Autostable. Large surface/volume ratio.
Slide-A-Lyzer G2 	(5sizes). 100-800µl 0.5-3ml 15/ 30/ 70ml	(4 MWCO) 2KDa to 20KDa (5 MWCO) RC (regenerated cellulose)	<i>Convenient ready-to-use dialysis device</i> easy loading (no syringe), and floating (no need for accessory floats)
MiniSlideALyzer 	(1size) 10 µl-100 µl	3.5KDa, 7KDa, 10KDa RC (regenerated cellulose)	<i>Unique ready-to-use dialysis device for small volumes</i>
XPress MicroDialyzer 	(1size) 10 µl-100 µl	1KDa, 3.5KDa, 6-8KDa, 12-14KDa (regenerated cellulose)	<i>Unique format – stackable in microplates.</i> <i>Very quick dialysis</i>
Ultra-Micro DispoDialyzer	(2sizes). 1-5µl & 5-100µl	100Da-50KD - CE (cellul. Ester)	<i>Device for dialysis of very small samples</i>
Disposable Dialysis devices	HFiber: 0.5-10µL µcro: 5-100µL	10kDa 1 to50KDa	<i>Unique fiber technology</i>
Dialysis Fibers	5µl	13 & 18 KD	<i>Designed for in-vivo dialysis</i>
Tube-O-Lyzer	5-100ml	100Da-100kD	<i>Dynamic dialysis</i>
Bio&FastDIALYZERS (re-usable; Spinable) (electroelution compatible)	(3sizes & assembl.). 10-200µl 250µl-1.5ml 3-5ml & +	100Da-300KD CE (cellulose acetate) 1K to 50K Da - RC (regen.cellul)	<i>Device for dialysis and electroelution (ElectroPrep) that can be assembled with a variety of membranes, together,...</i> +Flow-Thru FastDIALYZER
FastDialyzer (re-usable)	50µl – 5ml (4sizes).	Any available membrane	<i>Re-usable device</i>
RED Dialysis Device	100-500µl	8/12kDa	<i>Equilibrium dialysis up to 48samples</i>
96-Well DIALYZER	(1size). 25-300µl	1, 2, 5, 10, 25KD	<i>Device for multiple samples, and equilibrium dialysis</i>
HTD 96-well Equilibrium Dialysis plate	(2sizes). 25-75µl&25-150µl	3.5/6/12/25/50kDa 96well plates.	<i>Equilibrium dialysis up to 96 samples simultaneously.</i>
Dialysis Buttons	5-350µl	Any cutoff (3.5 - 6/8 - 12/14KDa)	<i>dialysis for crystallization compatible with 96-well plates</i>
2/Tubings : dialysis of large samples			




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2/Tubings : dialysis of		large samples	
<u>CelluSep tubings</u> (CelluSep T1/2/3/4)  (CelluSep H1 tubings)	Tubing 100µl to Liters	Tubing ↔ 3.5 to 14 KDa RC (regenerated cellulose)	<i>Economic (highest quality/price, for standard applications)</i>
	Tubing 100µl to 200ml	Tubing sections ↔ 1 KDa to 50 KDa RC (regenerated cellulose)	<i>Pre-treated membranes and ready-to-use pre-cut lengths</i> Ideal for nucleic acids, but suits also for proteins
<u>Spectra/Por tubings</u> (Spectra/Por 1.2.3.4.5.6.7) (Spectra/Por RC&CE Biotech) 	Tubing 100µl to Liters	↔ 100 Da to 1 000 KDa Biotech RC (regenerated cellulose)	<i>The high grade dialysis tubing, with largest choice of MWCO, membrane types, volumes</i>
		↔ 3.5 to 25KDa Biotech CE (cellulose ester)	
Others tubings V ¹			inquire
<u>S/P Dialysis recirculation tanks</u> 	100ml to 2.2L and more up +10-50L (combo)		
Special Dialysis systems:	see below	(equilibrium dialysis, multiple dialysis, electro dialysis,...)	

Description of Main Products Lines

>> DIALYSIS TUBINGS

SpectraPor tubings, sheets and discs

Spectra/Por® membranes are the most trusted and used laboratory dialysis tools. These membranes exist :

- In regenerated cellulose (RC), made of cellulose linters (Spectra/Por® 1.2.3.4), or natural cellulose and paper (Spectra/Por® 5.6.7), and with the high quality grade Biotech RC membrane.
- In cellulose acetate (CE), made from single compounds of pure cellulose, with the highest quality grade for Biotech CE membranes.
- In PVDF (polyvinylidene fluoride) (Spectra/Por® Type F)

=> [Selection guide \(page B104\)](#) and detailed presentation of [Biotech range](#)



CelluSep tubings

Discontinued

CelluSep® Dialysis tubings are the best choice for cost-effective dialysis, notably in Biology applications, for proteins and nucleic acids. They are regenerated cellulose membranes, and available with MWCO of 3.5KDa, 6KDa and 12KDa (T1/2/3/4 series), with sizes suitable for 100µl to Liters. The H1 series suit applications that need more precise separations, with cut-off from 1KD to 50Da, cleanest membranes, or more convenience (already soaked pre-cut membranes).

=> detailed [presentation \(page B104\)](#) and [Technical sheet](#)

Continued: ready-to-use dialysis devices:

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>>READY-TO-USE DIALYSIS DEVICES:

Float-A-Lyzer

Float-A-Lyzer dialysis devices are convenient means for dialyzing with flexibility for volumes (from ca.300 µl to 10 ml) and Molecular weight cut-off (ranging from 3.5KDa up to 100 KDa). Furthermore, they are a preferred choice because they allow for repeated free access to the sample, and do not need any accessories for floating (no syringe: a pipette is provided), nor floating boys. Membranes are made of Cellulose Ester.

=> detailed presentation of the new [FloatALyzers](#)



GebaFlex

GebaFlex dialysis devices allows both dialysis and elution. Furthermore they are very economic. They are available in 3 sizes; Mini (**10-250µl**), Midi (**50-800µl**), Maxi (**0.1-3ml**) and Mega (**3-20ml**), with MWCO of **1KDa, 3.5KDa, 7KDa, 12Kda, 25Kda, 50KDa**, in molecular

biology grade. Sample loading and unloading is very easy, and do not need accessories.

=> detailed presentation: [Technical sheet](#). See also below the [96-tub format](#).



MiniSlide-A-Lyzer

MiniSlide-A-Lyzer units are convenient means for dialyzing sample volumes from **10 µl to 100 µl**, with molecular cut-off of **3.5KDa, 7KDa, and 10KDa**.

The unit allows for excellent sample recoveries.

=> detailed presentation: [MiniSlide-A-Lyzer](#)



Slide-A-Lyzer & Slide-A-Lyzer G2

Slide-A-Lyzer Cassettes are convenient means for dialyzing sample volumes from **100 µl to 30 ml**, with molecular cut-off of **2KDa, 7KDa, 10KDa, and 20KDa**. The cassette's design provides a maximum surface area/sample volume ratio, and excellent sample recoveries, with the use of syringes.

=> detailed presentation: [Slide-A-Lyzer](#)

The new version Slide-A-Lyzer G2 are convenient means for dialyzing sample volumes from **100µl to 70ml**, with molecular cut-off of **2KDa, 3.5, 7, 10 and 20KDa**. The unit allows for easier loading with pipettes, self-flotation and excellent sample recoveries.

=> detailed presentation: [Slide-A-Lyzer G2](#)



Dialyzer (Fast, Spin-)

The **Bio-,Fast-and Spin-DIALYZER** are simple re-usable devices for dialysis of biological samples

that accommodates sample volumes ranging from as little as 10 µl up to 5 ml and MWCO from 100KD to 300 KDaltons.

=> detailed presentation: [Fast&Spin BioDialyzers](#)



DispoDialyzer (Micro-, Ultra-, 96-wells)

The **Micro- &Ultra-DispoDialyzer** is a disposable Dialyzer for the dialysis of small sample volumes from 1 to 5µl or 5 µl to 100 µl. Sample recovery is quick and easy, almost 100% after a short centrifugation step of the device after inversion in a new tube.

The **96-Well DispoDialyzer** allows the simultaneous dialysis of 96 samples of 25-300µL.

=> detailed presentation: [Micro-&Ultra-&96Well-DispoDialyzers](#)



>>96-WELL FORMAT COMPATIBLE RTU DIALYSIS DEVICES:

XPress Dialyzer

The Xpress Micro Dialyzer combines ease of use, versatility, reliability and accuracy. It is easy, cheap and dialyzes super fast very small volumes of samples (10 µl to 100 µl). Easy filling and residue-free removal of the sample is achieved using standard pipette/tips –no syringe or tedious methods-. Dialysis units can be then positioned onto vials or on high volume microplates wells. They are provided assembled by 8 in cartridges (but separable individually if needed), that allow easy transfer from microplate raw to raw. => detailed presentation: [XPress](#)



<iframe width="640" height="360" src="https://www.youtube.com/embed/sdqaT-yFBo" title="YouTube video player" frameborder="0" allow="accelerometer; autoplay; clipboard-write; encrypted-media; gyroscope; picture-in-picture" allowfullscreen></iframe>

96-Tube Dialyzer

GeBAflex tube 96 Format Dialyzer 6-8kDa

GeBAflex tube 96 Format Dialyzer 12-14kDa

96 tubes, MWCO 6.8 or 12-14 kDa, one aluminum foil sealer, 96 tubes floater and 96 caps. ^[2]

GeBAflex tube 96 Format Dialyzer 25kDa

96 tubes, MWCO 25 kDa, one aluminum foil sealer, 96 tubes floater and 96 caps. ^[1]

Tubs floater

96 tubes floater ^[2]

BUYRD0-D070-6-96, 1plate-96tubs

BUYRE0-D070-12-96, 1plate-96tubs

BUYRF0-D070-25-96, 1plate-96tubs

BUYRG0-D070 96 FI, 1u

Specifications

- Membrane is ultra clean, EDTA treated, sulfur and heavy metal free, regenerated cellulose.
- Compatible with regular pipet, multi channel pipet or robotic dispensing.
- Each tube has a 250 µl volume capacity.
- MWCO, 6.8, 12-14 and 25 kDa
- Storage: +2-30°C for D070 25 96 2 8 0 C
- Transport: +2-30°C
- Shelf life: 36 months

Applications

- Real high throughput dialysis and buffer exchange 1 to 96 samples.
- 96 format dialysis suitable to apply samples with multi channel pipet.
- Best for Dialysis and buffer exchange of 96 samples applying out directly from 96 well plate
- Dialysis and buffer exchange of protein samples into physiologically relevant buffer after refolding optimization



2/ By applications:

Applications	Recommended / first choice	Alternative choices
Small volumes / Ready-to-use	devices	
" sample volume <10µl	see UltraMicroDispoDialyzers (1-5µl, 100Da-50 KDa)	
" sample volume <200µl	see XPress microdialysis device (10-100µl x 1-96) see Micro-Float-A-Lyzer (100-300µl, 100Da to 50 KDa) see GebaFlex Mini (10-250µl, 6 to 14 KDa)	MiniSlideALyzer (10-100µl, 3.5-10KDa) MicroDispoDialyzers (5-100µl, 100Da to 50 KDa) BioDialyzers (100Da-300KD, 10µl-5ml), ElectroPrep, 96well Dialyzers (25-300µl; 1-25KDa)
" sample volume 100-300µl or max volume flexibility	see GebaFlex Midi (50-800µl, 6 to 25KDa - economic and flexible)	Slide-A-Lyzer (0.5-3ml, 3.5, 7, 10KDa) BioDispoDialyzers (100Da-300KDa, 10µL to 5ml) Float-A-Lyzer (100µl-10ml, 500Da to 50 KDa - economic) HTD Equilibrium Dialysis Device (100-500µl)
" sample vol 300µl to 10ml	see Float-A-lyzer (300µl-10ml, 100/500Da to 50 KDa)	GebaFlex (more economic and flexible), Slide-A-Lyzer, DispoDialyzer (available sterile)
" sample vol up to 20-30ml	see GebaFlex Mega (1 KDa to 50KDa; economic & flexible)	Slide-A-Lyzer 3-20ml, 3.5 / 7 / 10KDa only
" sample vol up to 30-70ml	see Slide-A-Lyzer G2 (0.1-70ml, 2-20KDa only) see CelluSep T1/2/3/4 tubings	see Spectra/Por tubings
Tubings: large volumes		
standard applications (proteins, >5Kda, >0.5ml)	see CelluSep T1/2/3/4 tubings	Spectra/Por tubings (more choice of cutoff, size, membrane quality,...)
special quality membranes...	see Spectra/Por tubings	
scalable dialysis / large volumes	see Process Dialysis, Desalting, Concentration, Filtration, Clarification (TFF, Hollow fibers)	
Very Small or Large MWCO	devices	
MWCO <3 000Da	see Ultra MicroDispoDialyzers (1-5µl, 100Da-50 KDa) see MicroDispoDialyzers (5-100µl, 100Da to 50 KDa) see Float-A-Lyzer (100µl-10ml, 100-500Da to 50 KDa) see GebaFlex (1000Da, 0.1-3ml)	
MWCO >50 000Da	see GebaFlex (1000Da, 0.1-3ml)	see Ultra MicroDispoDialyzers (1-5µl, 100Da-50 KDa) see MicroDispoDialyzers (5-100µl, 100Da to 50 KDa)
Specific applications		
Standard applications (proteins, >5KDa, >0.5ml)	see Tubing: CelluSep T1/2/3/4 tubings see Ready-to-use: GebaFlex (50-800µl, 6 to 25KDa; economic, flexible)	Spectra/Por tubings (more choice of cutoff, size, membrane quality,...)
Re-usable dialysis devices	see FastDialyzers ,	see HTD Equilibrium Dialysis Device (100-500µl)
Sterile dialysis	see Slide-A-Lyzer see CultureGard & MediaKap (hollow fiber filters) see KrosFlo modules (sterile TFF process dialysis)	Sterilize your self (procedures/page 4)
Peptide dialysis	choose 100-3 000Da MWCO membranes: see GebaFlex (1000-3 000Da), See DispoDialyzers (100Da-3KDa) See CelluSep H1 tubings (1000-3 000Da),	(devices) Float-A-Lyzer, MiniSlideALyzer (tubing) CelluSep H1 tubings, Spectra/Por tubings
Nucleic acids dialysis	see CelluSep H1 tubings	see Spectra/Por Biotech, S/P6&7 tubings
Crystallography	see Spectra/Por tubings /Biotech RC & CE membranes	
Organic solvents, acids or bases	see compatibility table/membranes types . see Spectra/Por tubings /SpectraPor F, RC Biotech	
Equilibrium dialysis – systems – reusable	see MicroDialyzer cells/sytems (disc.) see RED Dialysis Device and Competitive-RED (25-150µl) see HTD Equilibrium Dialysis Device (100-500µl)	see BioDialyzers (100Da-300KD, 10µl to 5ml) see MacroDialysis cells/systems
Equilibrium dialysis – single use	see Equilibrium XPress microdialysis (10-100µl) see 96well Equilibrium Dialyzers (25-300µl; 1-25KDa),... with Plate Rotators for 1/2/8plates, operated with a controled dialysis buffer volume	see RED Dialysis Device and Competitive-RED (25-150µl)
Multiple dialysis - HTS	see XPress microdialysis device (10-100µl x 1-96) see 96well Dialyzers (25-300µl; 1-25KDa),...	see HTD Equilibrium Dialysis Device (100-500µl)
Electrodialysis	see GebaFlex see ElectroPrep/BioDialyzers	
MW fractionation	see ElectroPrep/BioDialyzers, OFFGel	
<i>In-vivo</i> dialysis	see Hollow fiber implants (1mm diam.; 6-8&13-18KDa)	

3/ Other dialysis systems & related product lines:

- MicroDialyzers see [Product Highlight](#)
a system to dialyse/ultrafiltrate 5 – 96 samples of 150 to 500 µl; Exclusion limit : 100 Da to 300 000 Daltons
- BioDialyzer & ElectroPrep system see [Product Highlight](#)
a versatile system to built dialysis chambers in series, with different MWCOs, can be placed in an electric field (electroelution), combine online flow of sample,...
- Ultrafiltration with centrifugal units see [Product Highlight](#) / VivaCon & VivaSpin (0.1-15ml)
Centrifugation driven ultrafiltration for samples from 100µl to 15ml. Ideal for concentration.
- Ultrafiltration stirred cells see [Product Highlight](#)
pressure drive ultrafiltration for samples from ml to Liters Ideal for concentration and diafiltration.
- Tangential Ultrafiltration (Micro, Mini-, Midi-Kros hollow fibers modules and KrosFlow systems)
From research to pilot and production scale see [Product highlights](#) [KrosFlow systems](#) and [UF filters](#)
- MicroFiltration (DynaGard filters / sample preparation) see [Product Highlight](#)
- MicroFiltration (MediaKap filters / cell culture) see [Product Highlight](#)
- Macrofiltration see [Product Highlight](#)
Macro Woven Filters made of Fluorocarbon, Nylon, Polyester, Polyethylene, Polypropylene or Stainless Steel
- CellMax artificial capillary cell culture system see [Product Highlight](#)
- Gelfiltration desalting columns see [Uptima D-salt columns](#), [ZebaSpin](#)

Related products/documents

[Products HighLights Overview](#)
[FluoProbes labeling agents](#)
[Crosslinking agents](#)

Information inquire

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