

Your complete protein clean-up toolbox



Thermo Scientific™ protein sample clean-up devices have evolved over the last decade to meet a variety of customer needs. Our broad portfolio of high-performance tools provides easy handling, enhanced sample protection and exceptional recovery for volumes between 10µL and 250mL. Available in a variety of formats, it's easy to find the best product for your application.

- Dialysis • Desalting • Concentration • Buffer exchange • Purification • Detergent removal

Dialysis

Mini dialysis devices

Thermo Scientific™ Slide-A-Lyzer™ MINI Dialysis Units are convenient and easy-to-use devices that completely remove salts or other small molecular weight contaminants from precious low-volume samples while providing maximum sample recovery.



Sample volume: 10µL to 2mL

- **Three convenient sizes** – dialysis devices for 0.1, 0.5 and 2mL samples fit standard 1.5mL microcentrifuge tubes, and 15mL and 50mL conical tubes, respectively
- **Five membrane cut-offs** – color-coded to easily distinguish between 2K, 3.5K, 7K, 10K and 20K MWCO
- **Excellent sample recoveries** – low protein binding plastic and small membrane surface area minimize sample loss
- **100% leak tested** – innovative design does not permit “wicking” that can occur in homemade devices
- **Time savings** – performs desalting of nucleic acids and proteins (>95% recovery) in less than 15 minutes, which improves sample resolution, quantification and conjugation

Slide-A-Lyzer MINI Dialysis Devices, 2K MWCO

PI69580	0.1mL	50 devices
PI69553	0.1mL	250 devices

Slide-A-Lyzer MINI Dialysis Devices, 3.5K MWCO

PI69550	0.1mL	50 devices
PI69552	0.1mL	250 devices
PI88400	0.5mL	25 devices
PI88403	2mL	25 devices

Slide-A-Lyzer MINI Dialysis Devices, 7K MWCO

PI69560	0.1mL	50 devices
PI69562	0.1mL	250 devices

Slide-A-Lyzer MINI Dialysis Devices, 10K MWCO

PI69570	0.1mL	50 devices
PI69572	0.1mL	250 devices
PI88401	0.5mL	25 devices
PI88404	2mL	25 devices

Slide-A-Lyzer MINI Dialysis Devices, 20K MWCO

PI69590	0.1mL	50 devices
PI69555	0.1mL	250 devices
PI88402	0.5mL	25 devices
PI88405	2mL	25 devices

Slide-A-Lyzer MINI Dialysis Device Floats

PI69588	25-unit capacity	4 floats
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Dialysis cassettes and flasks

Thermo Scientific™ Slide-A-Lyzer™ G2 Dialysis Cassettes offer easy sample loading and removal using a serological pipette. The built-in air chamber provides buoyancy and maintains the vertical orientation of the cassette during dialysis. The new Thermo Scientific™ Slide-A-Lyzer™ Dialysis Flasks are designed to process sample volumes of 150mL to 250mL.



Sample volume: 0.1 mL to 250mL

- **Superior design** – thoroughly researched and tested to provide fast and consistent dialysis with maximum sample recovery
- **Multiple sizes** – select the device that best suits your sample volume
- **Easy loading** – pipette-accessible for easy sample loading and retrieval
- **Self floating** – integrated air chambers eliminate the need for float buoys

Slide-A-Lyzer G2 Dialysis Cassettes and Flasks, 2K MWCO

PI87717	0.5mL	10 cassettes
PI87718	3mL	10 cassettes
PA87719	15mL	8 cassettes
PI87720	30mL	6 cassettes
PA87721	70mL	6 cassettes
PI87760	250mL	4 flasks

Slide-A-Lyzer G2 Dialysis Cassettes, 3.5K MWCO

PI87722	0.5mL	10 cassettes
PI87723	3mL	10 cassettes
PA87724	15mL	8 cassettes
PI87725	30mL	6 cassettes
PA87726	70mL	6 cassettes
PI87761	230mL	4 flasks

Slide-A-Lyzer G2 Dialysis Cassettes, 7K MWCO

PI87727	0.5mL	10 cassettes
PI87728	3mL	10 cassettes

Slide-A-Lyzer G2 Dialysis Cassettes, 10K MWCO

PI87729	0.5mL	10 cassettes
PI87730	3mL	10 cassettes
PA87731	15mL	8 cassettes
PI87732	30mL	6 cassettes
PA87733	70mL	6 cassettes
PI87762	250mL	4 flasks

Sterile Gamma-irradiated Slide-A-Lyzer G2 Dialysis Cassettes: check website

Slide-A-Lyzer G2 Dialysis Cassettes and Flasks, 20K MWCO

PI87734	0.5mL	10 cassettes
PI87735	3mL	10 cassettes
PA87736	15mL	8 cassettes
PI87737	30mL	6 cassettes
PA87738	70mL	6 cassettes
PI87763	250mL	4 flasks

Slide-A-Lyzer Flotation Disks

PI87759	Slide-A-Lyzer Flotation Disks	6 disks
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96-well microdialysis plates

Thermo Scientific™ Pierce™

96-well Microdialysis Plates are automation-compatible systems for simultaneously dialyzing between 1 and 96 samples with volumes up to 100µL. The dialysis inserts are provided in strips of eight preloaded in a 96-well deep-well plate, but can be separated easily for use as individual dialysis devices in standard microcentrifuge tubes.



Sample volume: 10µL to 100µL

- **Efficient and rapid dialysis** – dialysis completed in 2–4 hours with >99% salt removal
- **Excellent sample recovery** – >90% protein recovery after dialysis
- **Ideal for small sample volume dialysis** – uses sample volumes from 10 to 100µL
- **Easy to use** – complete sample loading and retrieval with a standard pipette
- **Flexible** – detachable 8-unit strips; scalable from 1 to 96 samples
- **Automation-compatible** – plate format conforms to SBS Microplate Standard

Pierce 96-well Microdialysis Plates

PI88262	3.5K MWCO	1-plate set
PI88260	10K MWCO	1-plate set

96-well Deep-well Plate

PI88261	2.2mL	1 plate
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Plate Seal for Pierce 96-well Microdialysis Plates

PI88269		1 sheet
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Desalting

Spin columns

Thermo Scientific™ Zeba™

Spin Columns and Plates quickly remove salts and small molecules from protein solutions. These easy-to-handle devices contain a proprietary resin that provides exceptional protein recovery.



Sample volume: 2µL to 4mL

- **High recovery** – low-binding resin maximizes protein recovery
- **Fast** – no fraction screening or waiting for protein to emerge by gravity flow
- **Easy to use** – no cumbersome column preparation or equilibration
- **Flexible** – available in spin columns, filter spin plates and cartridges for a range of needs
- **Economical** – great performance at lower cost than other commercially available cartridges

Zeba Spin Desalting Columns, 7K MWCO

PI89877	75µL	25 columns
PI89878	75µL	50 columns
PI89882	0.5mL	25 columns
PI89883	0.5mL	50 columns
PI89889	2mL	5 columns
PI89890	2mL	25 columns
PI89891	5mL	5 columns
PI89892	5mL	25 columns
PI89893	10mL	5 columns
PI89894	10mL	25 columns

Zeba 96-well Spin Desalting Plates, 7K MWCO

PI89807	96-well Plates	2 plates
PI89808	96-well Plates	4 plates

Zeba Chromatography Cartridges, 7K MWCO

PI89934	1mL	5 cartridges
PI89935	5mL	5 cartridges

Zeba Spin Desalting Columns, 40K MWCO

PI87764	75µL	25 columns
PI87765	75µL	50 columns
PI87766	0.5mL	25 columns
PI87767	0.5mL	50 columns
PI87768	2mL	5 columns
PI87769	2mL	25 columns
PI87770	5mL	5 columns
PI87771	5mL	25 columns
PI87772	10mL	5 columns
PI87773	10mL	25 columns

Zeba 96-well Spin Desalting Plates, 40K MWCO

PI87774	96-well Plates	2 plates
PI87775	96-well Plates	4 plates

Concentration

Protein concentrators (PES)

Thermo Scientific™ Pierce™ Concentrators are disposable ultrafiltration centrifugal devices with a polyethersulfone (PES) membrane for concentration, desalting and buffer exchange of biological samples. These products have molecular-weight cutoffs of 3K, 5K 10K, 30K and 100K and can be used for processing sample volumes up to 100mL.



Sample volume: 100µL to 100mL

- **Rapid processing** – sample concentration of 10- to 30-fold can be achieved in 5 – 30 minutes for 10K MWCO (device dependent – times may vary for other MWCO's)
- **High protein recovery** – unique design minimizes membrane fouling and provides high speed concentrations, even with particle laden solutions
- **Instrument compatible** – use standard centrifuges with fixed-angle or swinging-bucket rotors; collect and recover sample without invert spinning

Pierce Protein Concentrators, 3K MWCO

PI88512	0.5mL	25 units
10837-446	6mL	10 units
10837-448	6mL	24 units
10837-462	20mL	10 units
10837-464	20mL	24 units

Pierce Protein Concentrators, 5K MWCO

10837-470	100mL	4 units
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Pierce Protein Concentrators, 10K MWCO

PI88513	0.5mL	25 units
10837-450	6mL	10 units
10837-452	6mL	24 units
10837-466	20mL	10 units
10837-468	20mL	24 units
10837-472	100mL	4 units

Pierce Protein Concentrators, 30K MWCO

PI88502	0.5mL	25 units
10837-312	6mL	10 units
10837-330	6mL	24 units
10837-454	20mL	10 units
10837-456	20mL	24 units
10837-474	100mL	4 units

Pierce Protein Concentrators, 100K MWCO

PI88503	0.5mL	25 units
10837-334	6mL	10 units
10837-444	6mL	24 units
10837-458	20mL	10 units
10837-460	20mL	24 units
10837-476	100mL	4 units

Purification

Ion exchange spin columns

Thermo Scientific™ Pierce™ Strong Ion Exchange Columns enable rapid protein fractionation and purification based on surface membrane charge. Choose mini or maxi size and anionic or cationic format.



Sample volume: mini up to 500µL and maxi up to 20mL

- **Fast and simple** – membrane-based spin format eliminates column packing
- **Convenient** – centrifugal format enables convenient simultaneous processing of multiple samples
- **Robust** – membrane does not crack or run dry
- **Low bed volume** – low hold-up volume allows samples to be concentrated

Pierce Strong Cation Exchange Spin Columns

PI90008	Mini (500µL)	24 columns
PI90009	Maxi (20mL)	8 columns

Pierce Strong Anion Exchange Spin Columns

PI90010	Mini (500µL)	24 columns
PI90011	Maxi (20mL)	8 columns

Detergent removal

Detergent removal resins

Thermo Scientific™ Pierce™ Detergent Removal Resins come in two formulations that efficiently remove both detergents and surfactants with minimal sample loss. The original Pierce Detergent Removal Resin is recommended for samples with protein/peptide concentrations greater than 100µg/mL and volumes between 10µL and 1mL; the Thermo Scientific™ HiPPR (High Protein and Peptide Recovery) Detergent Removal Resin is ideal for samples with concentrations less than 100µg/mL and volumes between 20µL and 200µL. Both options are available in spin column formats and 96-well spin filter plates, allowing for rapid removal of interfering detergents before downstream analysis by mass spectrometry and other techniques.



Sample volume: 10µL to 1mL

- **High performance** – remove detergent with >90% recovery
- **Optimized** – different formulations to maximize recovery based on protein/peptide concentrations
- **Fast** – sample processing takes less than 15 minutes
- **Peptide detergent removal capability** – effectively removes detergents from peptide samples, improving mass spectrometry peptide coverage
- **Protein detergent removal capability** – to improve downstream applications
- **Convenient** – available in various formats, including 96-well spin plates, spin columns and bulk resin
- **Fast and efficient protocol** – 96 samples can be processed in 15 minutes with no sample dilution

HiPPR Detergent Removal Spin Column Kit

PI88305 5mL kit

HiPPR Detergent Removal Spin Columns

PI88306 0.1mL 24 columns

HiPPR Detergent Removal 96-well Spin Plates

PI88307 0.1mL 2 plates

Pierce Detergent Removal Resin

PI87780 10mL

Pierce Detergent Removal Spin Columns

PI87776 125µL 25 columns

PI87777 0.5mL 25 columns

PI87778 2mL 5 columns

PI87779 4mL 5 columns

Pierce Detergent Removal Spin Plates

PI88304 2 plates

Sample processing

Centrifuge columns

Thermo Scientific™ Pierce™ Centrifuge Columns are convenient tools available in multiple sizes for handling varying amounts of resin for sample clean-up and/or purification.



Simply add the resin to the column, remove the twist-off bottom and allow the resin to pack itself. Then add your sample and use a centrifuge to efficiently wash away any contaminants or to elute your purified protein. The spin format makes column washing and elution more efficient. For gravity-flow procedures or when slow processing time is desired, Thermo Scientific™ Pierce™ Column Extenders can be used to increase the column reservoir capacity.

Resin volume: 40µL to 10mL

- **Multi-purpose** – can be used in either spin or gravity-flow format
- **Efficient** – spin format reduces sample processing time
- **High recovery** – made from low protein binding polypropylene
- **Compatible** – fit into standard centrifuge tubes for use in any centrifuge

Pierce Centrifuge Columns

PI89868	0.8mL	50 columns
PI-89869	0.8mL	4 x 50 columns
PI89896	2mL	25 columns
PI89897	5mL	25 columns
PI89898	10mL	25 columns

Pierce Column Extenders

PI69707	10 extenders
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Tissue Strainer

The Thermo Scientific™ Pierce™ Tissue Strainer fits standard 15mL conical tubes for quick separation of cells or cell lysate from tissue debris through a 250µm nylon mesh filter after mechanical disruption, using gravity or gentle centrifugation, enabling the rapid isolation of cells for uniform protein extraction.



Sample volume: up to 2.5mL tissue sample per load

- **Convenient** – remove tissue debris from tissue homogenate within minutes using gravity filtration or gentle centrifugation
- **Compatible** – unique design fits into standard 15mL conical tubes
- **Versatile** – remove debris from a variety of tissues types, including liver, heart, brain, kidney, lung and spleen

Pierce Tissue Strainers

PI87791	250µm, 2.5mL	50 units
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Don't let your sample go down the tube.

Thermo Scientific™ Slide-A-Lyzer™ devices, cassettes and flasks protect your precious samples during dialysis and eliminate the hassles and risks of losing your samples using slippery tubing. They're available in sizes from 10µL to 250mL and in a full range of MWCOs.



Traditional tubing	vs.	Device, cassette or flask
<p>Slippery when wet Flat tubing is difficult to handle when wet, increasing risk of sample loss during sample addition/removal</p>	<p>Sample handling</p>	<p>Easy handling and secure sample delivery Device, cassette and flask formats enable convenient, secure sample addition/removal</p>
<p>Risk of sample loss Sample can leak out if clamp becomes loose or falls off</p>	<p>Sample recovery</p>	<p>Sample protection Integrated or welded membrane design and secure caps eliminate the risk of sample loss</p>
<p>Time consuming Non-optimized design that typically requires overnight dialysis</p>	<p>Speed</p>	<p>Fast and efficient Innovative designs with high surface/volume ratio enable more rapid dialysis than conventional tubing</p>

Comparison of Thermo Scientific Slide-A-Lyzer devices, cassettes and flasks with traditional dialysis tubing.



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