

ProteoSpin™ Detergent Clean-Up Maxi Kit

The ProteoSpin™ Detergent Clean-up Maxi Kit provides a fast and simple procedure for the effective removal of SDS, Triton® X-100 and other detergents from protein samples. The kit employs spin-column chromatography using Norgen's patented protein resin as an ion exchanger. Each column is capable of processing 0.25 - 8 mg of either acidic or basic protein. The ProteoSpin™ Detergent Clean-up Maxi Kit provides a convenient method for removing detergents from larger protein samples before running downstream applications including mass spectrometry, SDS-PAGE, proteolytic digestion, isoelectric focusing, x-ray crystallography and NMR spectroscopy.



Kit Specifications			
Maximum Protein Input	8 mg	% Detergent Removal	> 95%
Minimum Protein Input	0.25 mg	Minimum Elution Volume	4 mL
Protein Recovery	Up to 100%	Time to Process 4 Samples	40 minutes

ProteoSpin™ Detergent Clean-up Maxi Kit Benefits

Fast and easy processing	This easy-to-use procedure allows processing of a number of samples in about 40 minutes
No detergent carryover	Each sample is processed individually using its own spin column, resulting in no carryover or column bleed from sample to sample.
Useable with a variety of detergents	The kit can be used to remove detergents including SDS, Triton® X-100, CHAPS, NP-40, and Tween 20.
Effective detergent removal	Removes more than 95% of detergents for many protein samples, allowing tryptic digestion.
High recovery	Protein recoveries of up to 100% (using initial detergent concentrations of 0.1% and 1.0%) for many proteins (Table 2).
Suitable for downstream applications	Final elution suitable for: <ul style="list-style-type: none"> • Mass spectrometry • SDS-PAGE • Proteolytic digestion • Isoelectric focusing • X-ray crystallography • NMR spectroscopy

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Sample	A ₆₀₀	% SDS Remaining	% SDS Removal	mg SDS Removed
Control (water)	0	0	0	0
0.1% SDS	0.271			
Sample 1 (0.1% SDS)	0.007	0.0026%	99.99%	4.987
Sample 2 (1.0% SDS)	0.002	0.007%	99.99%	49.97

Table 1. Efficient Removal of SDS

Removal of SDS with the ProteoSpin™ Detergent Clean-Up Maxi Kit is greater than 99%, with up to 50 mg of SDS being removed.

Detergent Clean-up Maxi Kit Contents

1. Column Activation and Wash Buffer for Acidic Proteins
2. pH Binding Buffer for Acidic Proteins
3. Column Activation and Wash Buffer for Basic Proteins
4. pH Binding Buffer for Basic Proteins
5. Elution Buffer
6. Neutralizer
7. Maxi Spin Columns
8. Elution Tubes
9. Application Manual

Shipping Conditions

The ProteoSpin™ Detergent Clean-up Maxi Kit is shipped at room temperature.

Input Amount (mg)	% SDS	Eluted Amount (mg)	% Recovery
1 mg Lysozyme	0.1%	0.94 mg	94%
2 mg Lysozyme	1.0%	2 mg	100%
2 mg BSA	0.1%	2 mg	100%
4 mg BSA	1.0%	3.7 mg	92.5%

Table 2. High Recovery of Proteins from an SDS-Containing Solution

The recovery of both acidic and basic proteins from solutions containing SDS is high using the ProteoSpin™ Detergent Clean-up Maxi Kit. Recoveries of up to 100% are often observed.

Customer-Supplied Reagents and Equipment

- Benchtop centrifuge
- Micropipettors
- pH indicator paper
- Other optional elution buffers
- Isopropanol
- Sterile, deionized water or Milli-Q® water

Storage Conditions

Unopened solutions should be stored at room temperature. Once opened, the solutions should be stored at 4°C when not in use, except for the Basic and Acidic Binding Buffers, which should be stored at room temperature.

Cat #	Description	Quantity
17100	ProteoSpin™ Detergent Clean-up Maxi Kit	4 preps