

## ProteoSpin™ CBED (Concentration, Buffer Exchange and Desalting) Maxi Kit

The ProteoSpin™ CBED Maxi Kit provides a fast and simple procedure for concentrating large volumes of dilute protein solutions, for buffer exchange, and for removing different types of salts from protein samples. The kit is based on spin-column chromatography using Norgen's patented protein resin as an ion exchanger. Salts such as MgCl<sub>2</sub>, NaCl, KCl, CaCl<sub>2</sub>, LiCl, and CsCl have poor affinities for Norgen's resin and are easily removed from the sample. The elution is performed with choices of several different buffer solutions, allowing for salt-free elutions or buffer exchange. Each spin column can process 0.25 mg - 8 mg of protein from up to 100 mL of solution. The kit contains complete solutions for the preparation of both acidic and basic proteins.



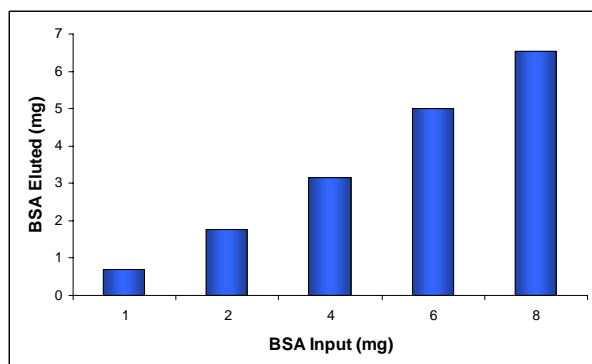
Kit Specifications			
Maximum Protein Input	8 mg	% Salt Removal	Up to 99%
Minimum Protein Input	0.25 mg	Volume Concentration Factor	Up to 25X
Protein Recovery*	Up to 99%	Minimum Elution Volume	4 mL
Column Binding Capacity	8 mg	Time to Process 4 Samples	20 minutes

\*Recoveries of up to 99% have been achieved using BSA and the supplied elution buffer. Recovery will vary depending on the protein sample and the elution buffer used.

### ProteoSpin™ CBED Maxi Kit Benefits

Fast and easy processing	Efficiently process 4 samples in about 20 minutes using an easy-to-use protocol.
No mixing or formulation	Solutions and protocols are provided for both acidic and basic proteins with no need for formulation.
No molecular weight cutoff	Based on an ion exchange mechanism, a broad size range of proteins (from peptides to large proteins) can be processed.
Proteins bind while salts are discarded in flowthrough	Norgen's resin has an inherent low affinity for salt but high affinity for proteins, providing salt removal and buffer exchange simultaneously
Suitable for downstream applications	<p><b>Final elution performed with volatile or non-volatile buffers suitable for:</b></p> <ul style="list-style-type: none"> <li>• Mass spectrometry</li> <li>• SDS-PAGE</li> <li>• Isoelectric focusing</li> <li>• X-ray crystallography</li> <li>• NMR spectroscopy</li> </ul>

## ProteoSpin™ CBED (Concentration, Buffer Exchange and Desalting) Maxi Kit



**Figure 1. High Protein Recovery**

Increasing amounts of BSA were bound and eluted from the spin columns in the ProteoSpin™ CBED Maxi Kit. High recoveries of up to 90% were observed.

### CBED 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

### Customer-Supplied Reagents and Equipment

- Benchtop microcentrifuge
- Micropipettors
- pH indicator paper
- Other elution buffers (optional)

**Table 1. Examples of BSA Volume Concentration using the ProteoSpin™ CBED Maxi Kit**

Input Volume	Output Volume	Concentration Factor
20 mL	4 mL	5X
60 mL	4 mL	15X
100 mL	4 mL	25X

**Table 2. Examples of BSA Mass Concentration using the ProteoSpin™ CBED Maxi Kit**

Input Concentration	Output Concentration	Concentration Factor
8 mg / 20 mL (0.4 µg/µL)	7.89 mg / 4 mL (1.97 µg/µL)	5X

### 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.

### Shipping Conditions

The ProteoSpin™ CBED Maxi Kit is shipped at room temperature.

Cat #	Description	Quantity
17000	ProteoSpin™ CBED Maxi Kit	4 preps