

# ProteoSpin™ Inclusion Body Isolation Maxi Kit

The ProteoSpin $^{\text{TM}}$  Inclusion Body Isolation Maxi Kit facilitates the isolation of recombinant proteins expressed in the form of inclusion bodies from *E. coli*. The kit includes reagents specially formulated to achieve rapid and high-quality purification of inclusion body proteins using three processes:

- 1. Lysis of bacterial cells to release inclusion bodies in solid form
- 2. Solubilization of purified inclusion bodies
- 3. Purification of the recombinant protein using SiC spin column chromatography

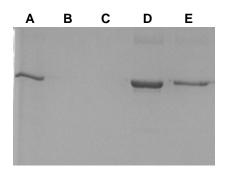
The ProteoSpin™ Inclusion Body Isolation Maxi Kit employs spin-column chromatography using Norgen's proprietary resin as an ion exchanger. Each spin column is able to purify up to 12 mg of recombinant protein from 100 mL of bacterial culture. The kit is designed to purify both acidic and basic proteins.



ProteoSpin™ Inclusion Body Isolation Maxi Kit Benefits		
Three kits in one for acidic and basic proteins	The kit provides essential reagents for cell disruption, inclusion body solublization, and purification using spin column chromatography. The kit includes solutions and protocols for use with either acidic or basic proteins.	
Gentle disruption procedure provides high purity final product	Cell lysis is accomplished through non-ionic detergent chemical disruption. The use of a needle and syringe reduces viscosity and facilitates purification, producing proteins that are often >95% pure. Proteins are then ready for SDS-PAGE, 2D gels, mass spectrometry analysis or other procedures.	
Convenient process volume	Analyze 100 mL of microbial cell culture yielding up to 12 mg of protein.	
Fast and easy processing	Process time is about 2 hours for a single sample.	
Long kit shelf life	The kit uses an enzyme-free process with stable solutions for longer shelf life.	
Suitable for downstream applications	Final elution performed with volatile or non-volatile buffers suitable for:  Mass spectrometry  SDS-PAGE Refolding experiments	



# ProteoSpin™ Inclusion Body Isolation Maxi Kit





No proteins are lost during the isolation of a recombinant 30 kDa basic protein using the ProteoSpin<sup>TM</sup> Inclusion Body Isolation Maxi Kit. Lane A is the input, Lane B is the flowthrough from the input, Lane C is the wash, Lane D is the first elution, and Lane E is the second elution.

### **Inclusion Body Isolation Maxi Kit Contents**

- 1. Cell Lysis Reagent
- 2. Inclusion Body Solubilization Reagent
- Column Activation and Wash Buffer for Acidic Proteins
- 4. pH Binding Buffer for Acidic Proteins
- Column Activation and Wash Buffer for Basic Proteins
- 6. pH Binding Buffer for Basic Proteins
- 7. Elution Buffer
- 8. Neutralizer
- 9. Maxi Spin Columns
- 10. Collection Tubes
- 11. Elution Tubes
- 12. Syringes
- 13. Needles
- 14. Short Protocol Card
- 15. Product Insert

#### **Shipping Conditions**

The  $ProteoSpin^{\mathbf{TM}}$  Inclusion Body Isolation Maxi Kit is shipped at room temperature.

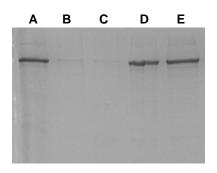


Figure 2. No Loss of Acidic Proteins

No proteins are lost during the isolation of a recombinant 70 kDa acidic protein using the ProteoSpin<sup>TM</sup> Inclusion Body Isolation Maxi Kit. Lane A is the input, Lane B is the flowthrough from the input, Lane C is the wash, Lane D is the first elution, and Lane E is the second elution.

### **Storage Conditions**

The Cell Lysis and IB Solubilization Reagent should be stored at 4°C upon receipt of the kit. For other unopened solution containers, the reagents should remain stable for 1 year when stored at room temperature. Once opened, the solutions should be stored at 4°C when not in use except for the pH Binding Buffer Acidic and Basic, which should be stored at room temperature. Some precipitation will occur with 4°C storage. This precipitation should be dissolved with slight heating to room temperature before use.

Customer-Supplied Reagents and Equipment

- Benchtop centrifuge (capable of spinning 50 mL conical tubes)
- Centrifuge (capable of spinning 40 mL tubes and 250 mL bottles)
- Centrifuge tubes (40 mL)
- 50 mL conical tubes
- Sterile 100 mL bottles

Cat #	Description	Quantity
17700	ProteoSpin™ Inclusion Body Isolation Maxi Kit	4 samples

344 Merritt St., St. Catharines, ON, Canada L2T 1K6 Phone: 905-227-8848 Fax: 905-227-1061

North American Toll Free: 1-866-667-4362