

ProteoSpin™ Inclusion Body Protein Isolation Micro Kit

The ProteoSpin™ Inclusion Body Protein Isolation Micro Kit facilitates the screening of *E. coli* clones that express recombinant proteins in inclusion bodies. The kit includes reagents specially formulated to achieve rapid and high-quality purification of inclusion bodies 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 spin column chromatography

Downstream applications include SDS-PAGE analysis, refolding experiments, mass spectrometry, further purification and scale up.

The ProteoSpin™ Inclusion Body Protein Isolation Micro Kit employs spin-column chromatography using Norgen's proprietary protein resin as an ion exchanger. Each spin column can isolate up to 50 µg of either acidic or basic protein from 1.5 mL of bacterial culture.



Kit Specifications			
Maximum Culture Volume	1.5 mL	Minimum Elution Volume	30 µL
Yield from 1.5 mL of Culture	Up to 50 µg	Time to Process 12 Samples	60 minutes

ProteoSpin™ Inclusion Body Protein Isolation Micro Kit Benefits

Three kits in one for acidic and basic proteins	The kit provides essential reagents for cell disruption, inclusion body solubilization 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 1.5 mL of microbial cell culture yielding up to 50 µg of protein.
Fast and easy processing	Process up to 12 samples in only 60 minutes
Long kit shelf life	The kit uses an enzyme-free process with stable solutions for longer shelf life.
Suitable for downstream applications	<p>Final elution performed with volatile or non-volatile buffers suitable for:</p> <ul style="list-style-type: none"> • Mass spectrometry • SDS-PAGE • Refolding experiments

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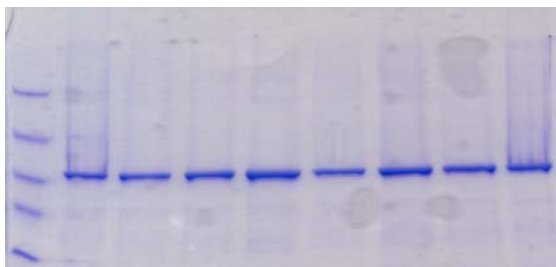


Figure 1. Isolation of Acidic Proteins
Isolation of a recombinant 50 kDa chimeric protein (acidic) using the ProteoSpin™ Inclusion Body Protein Isolation Micro Kit.

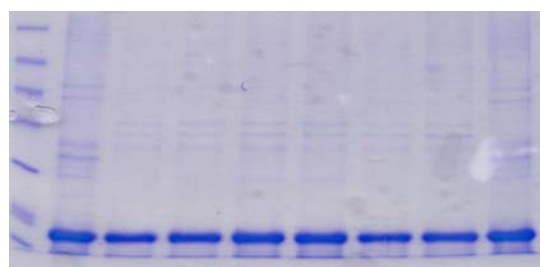


Figure 2. Isolation of Basic Proteins
Isolation of recombinant RNaseA (basic protein) using the ProteoSpin™ Inclusion Body Protein Isolation Micro Kit.

Inclusion Body Protein Isolation Micro Kit Contents

1. Cell Lysis Reagent
2. Inclusion Body Solubilization Reagent
3. Column Activation and Wash Buffer for Acidic Proteins
4. pH Binding Buffer for Acidic Proteins
5. Column Activation and Wash Buffer for Basic Proteins
6. pH Binding Buffer for Basic Proteins
7. Elution Buffer
8. Neutralizer
9. Micro Spin Columns
10. Collection Tubes
11. Elution Tubes
12. Syringes
13. Needles
14. Application Manual

Customer-Supplied Reagents and Equipment

- Benchtop microcentrifuge
- Micropipettors
- Sterile, deionized water or Milli-Q® water

Storage Conditions

The Cell Lysis Reagent and the IB Solubilization Reagent should be stored at 4°C upon receipt of the kit. All other 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™ Inclusion Body Protein Isolation Micro Kit is shipped at room temperature.

Cat #	Description	Quantity
10300	ProteoSpin™ Inclusion Body Protein Isolation Micro Kit	20 preps
10600	ProteoSpin™ Inclusion Body Protein Isolation Micro Kit	50 preps