

ProteoSpin™ Inclusion Body Protein Isolation Maxi Kit

The ProteoSpin™ Inclusion Body Protein 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 spin column chromatography

Downstream applications include SDS-PAGE analysis, refolding experiments and mass spectrometry.



The ProteoSpin™ Inclusion Body Protein Isolation Maxi Kit employs spin-column chromatography using Norgen's proprietary protein resin as an ion exchanger. Each spin column can isolate up to 12 mg of either acidic or basic protein from 100 mL of bacterial culture.

Kit Specifications			
Maximum Culture Volume	100 mL	Minimum Elution Volume	4 mL
Yield from 100 mL of Culture	Up to 12 mg	Time to Process 1 Sample	1 hour

ProteoSpin™ Inclusion Body Protein Isolation Maxi 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 100 mL of microbial cell culture yielding up to 12 mg of protein.
Fast and easy processing	Process time is about 1 hour 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	<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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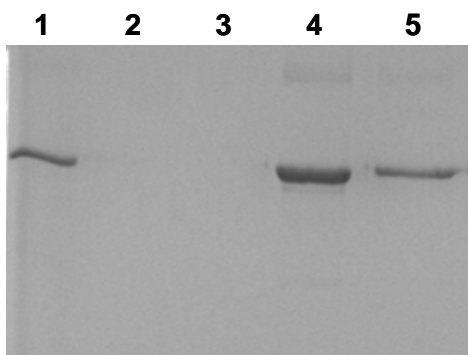


Figure 1. No Loss of Proteins when Isolating a Basic Protein

No proteins are lost during the isolation of a recombinant 30 kDa basic protein using the ProteoSpin™ Inclusion Body Protein Isolation Maxi Kit. Lane 1 is the input, Lane 2 is the flowthrough from the input, Lane 3 is the wash, Lane 4 is the first elution and Lane 5 is the second elution.

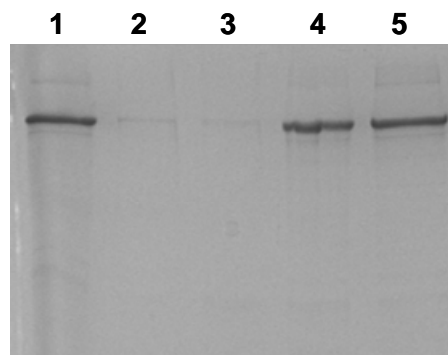


Figure 2. No Loss of Proteins when Isolating An Acidic Protein

No proteins are lost during the isolation of a recombinant 70 kDa acidic protein using the ProteoSpin™ Inclusion Body Protein Isolation Maxi Kit. Lane 1 is the input, Lane 2 is the flowthrough from the input, Lane 3 is the wash, Lane 4 is the first elution and Lane 5 is the second elution.

Inclusion Body Protein Isolation Maxi 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. Maxi Spin Columns
10. Collection Tubes
11. Elution Tubes
12. Syringes
13. Needles
14. Product Insert

Shipping Conditions

The ProteoSpin™ Inclusion Body Protein Isolation Maxi Kit is shipped at room temperature.

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.

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
- Sterile, deionized water or Milli-Q® water

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