

ProteoSpin™ Urine Protein Concentration Micro Kit

Urine protein analysis can be used for the identification of potential biomarkers in urine, and to diagnose and/or monitor renal and other diseases. The ProteoSpin™ Urine Protein Concentration Micro Kit provides a fast and simple procedure for concentrating dilute solutions of urine proteins from small volumes of urine. Purification is based on spin column chromatography using Norgen's proprietary resin as an ion exchanger. Urine proteins will bind to the column, while non-specifically bound materials



such as salts are easily removed from the sample. The simultaneous removal of salts while concentrating a dilute urine protein solution makes the kit a convenient method for preparing proteins before running downstream proteomic applications including SDS-PAGE, 2D gels, whole protein mass spectrometry, and protein microarrays.

Kit Specifications			
Maximum Urine Input Volume	1 mL	Minimum Elution Volume	30 µL
Maximum Recovered Protein	200 µg	Time to Process 12 Samples	20 minutes

ProteoSpin™ Urine Protein Concentration Micro Kit Benefits

Fast and easy processing	Efficiently process up to 12 samples in only 20 minutes using an easy-to-use protocol.
Complete kit	All columns and solutions required are provided.
No molecular weight cutoff	Based on an ion exchange mechanism, a broad size range of proteins can be processed.
Proteins bind while salts are discarded in flowthrough	Norgen's resin has an inherent low affinity for salt, and high affinity for proteins - providing salt removal and protein concentration simultaneously.
Suitable for downstream applications	Final elution suitable for: <ul style="list-style-type: none">• SDS-PAGE• 2D gel electrophoresis• Whole protein mass spectrometry• Protein microarrays

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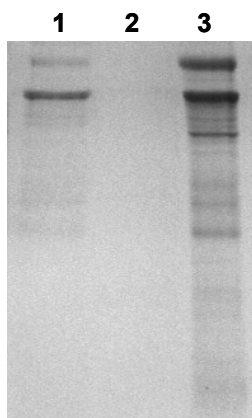


Figure 1. No Proteins Lost During Binding

No urine proteins are lost during the binding step, as can be seen by examining the binding flowthrough. Lane A is 25 μ L of input urine, Lane B is the binding flowthrough, and Lane C is 15 μ L of the concentrated eluted protein.

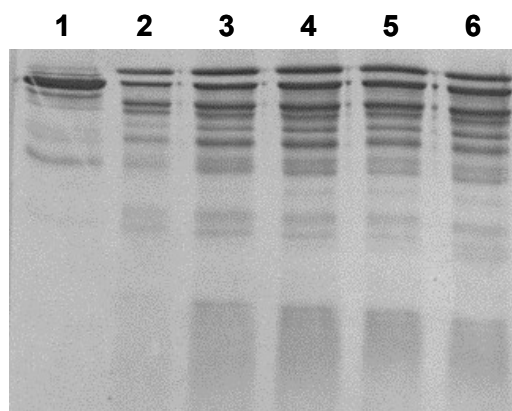


Figure 2. Protein Concentration of Increasing Volumes of Urine

A dose response indicating the concentration of urine proteins from increasing input amounts of urine. Lane 1 represents 25 μ L of an input urine sample, while lanes 2 to 6 are the elutions after the proteins were concentrated using the ProteoSpin™ Urine Protein Concentration Micro Kit. The input amounts of urine that were loaded onto each column were 100 μ L, 200 μ L, 300 μ L, 400 μ L, and 500 μ L respectively.

Urine Protein Concentration Micro Kit Contents

1. Wash Solution C
2. Binding Buffer A
3. Elution Buffer C
4. Protein Neutralizer
5. Micro Spin Columns
6. Collection Tubes
7. Elution tubes (1.7 mL)
8. Product Insert

Customer-Supplied Reagents and Equipment

- Benchtop microcentrifuge
- Micropipettors

Storage Conditions

All solutions should be kept tightly sealed and stored at room temperature. Once opened, the solution should be stored at 4°C.

Shipping Conditions

The ProteoSpin™ Urine Protein Concentration Kit is shipped at room temperature.

Cat #	Description	Quantity
17400	ProteoSpin™ Urine Protein Concentration Micro Kit	25 preps