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. Due to the fact that urine can be collected more readily and conveniently than blood, it provides an attractive alternative to blood plasma as a potential source of disease biomarkers

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. The kit employs spin-column chromatography using Norgen's patented protein 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 dilute urine protein solutions make the kit a convenient method for preparing urine proteins before running downstream proteomic applications. Each spin column is able to concentrate and desalt up to 200 µg of urine proteins.

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:** • **SDS-PAGE** • **2D gel electrophoresis** • **Whole protein mass spectrometry** • **Protein microarrays**

ProteoSpin™ Urine Protein Concentration Micro Kit

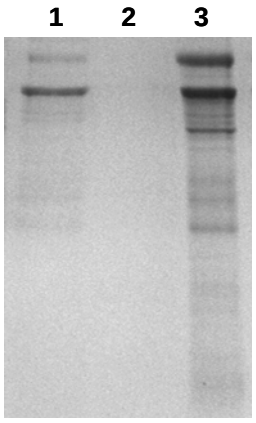

Figure 1. No Proteins Lost During Binding
No urine proteins are lost during the binding step, as can be seen by examining the binding flow-through. Lane A is 25 µL of input urine, Lane B is the binding flowthrough, and Lane C is 15 µL of the concentrated eluted protein.

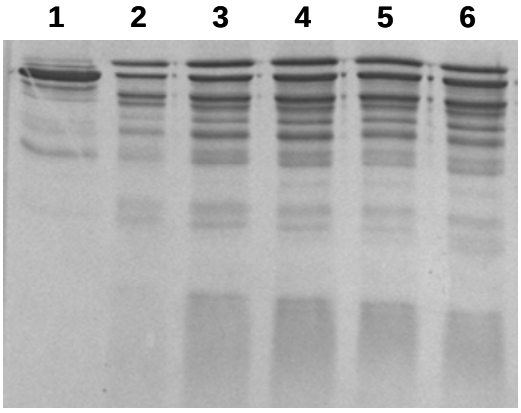

Figure 2. Protein Concentration of Increasing Volumes of Urine
A dose response indicating the concentration of urine proteins from increasing input amounts of urine. Lane 1 represents 25 µL of an input urine sample, while lanes 2 to 6 are the elutions after the proteins were concentrated using the Proteo-Spin™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

Urine Protein Concentration Micro Kit Contents

1. pH Binding Buffer
2. Column Activation and Wash Buffer
3. Elution Buffer
4. Neutralizer
5. Micro Spin Columns
6. Elution Tubes
7. Application Manual

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

3430 Schmon Parkway, Thorold, ON, Canada L24 4Y6 Phone: 905-227-8848 Fax: 905-227-1061
North American Toll Free: 1-866-667-4362