

ProteoSpin™ Urine Protein Concentration Midi Kit

The ProteoSpin™ Urine Protein Concentration Midi Kit provides a fast and simple procedure for concentrating dilute solutions of urine proteins from 1 to 5 mL inputs of urine. 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 purified urine proteins are both concentrated and free of salts, making this kit a convenient method for preparing proteins before running downstream proteomic applications including SDS-PAGE, 2D gels, whole protein mass spectrometry, and protein microarrays. Purification is based on spin column chromatography using Norgen's proprietary resin as an ion exchanger. The resin has a poor affinity for monovalent and divalent



cations, also making it an effective resin for the removal of salts. Thus in this case, urine proteins are preferentially purified from all other urine components including salts and other wastes.

Kit Specifications			
Minimum Urine Volume Input	1 mL	Minimum Elution Volume	0.2 mL
Maximum Urine Volume Input	5 mL	Time to Process 10 Samples	30 minutes

ProteoSpin™ Urine Protein Concentration Midi Kit Benefits

Fast and easy processing	Process up to 12 samples in only 20 minutes, compared to other concentrating methods that takes a minimum of 35 minutes per sample.
No molecular weight cutoff	Capture total proteins and peptides of all sizes, unlike other urine concentration methods with molecular weight cutoffs
Salt removal and buffer exchange	Norgen's kit allows for simultaneous salt removal and buffer exchange while concentrating urine proteins
Concentrated proteins can be used in a number of downstream applications	Final elution suitable for SDS-PAGE, 2D gel electrophoresis, Whole protein mass spectrometry and Protein microarrays

ProteoSpin™ Urine Protein Concentration Midi Kit

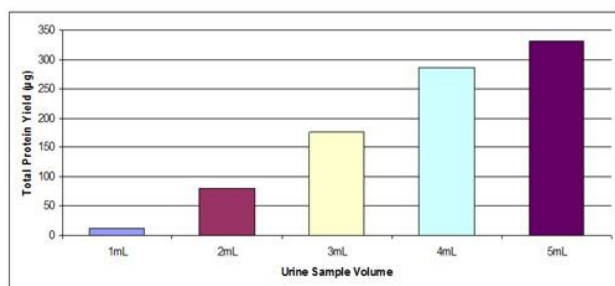


Figure 1. High Yield of Urine Proteins. Five different urine sample volumes were concentrated using Norgen's Urine Protein Concentration Midi Kit. The total urine protein yield from the different urine sample volumes processed using Norgen's kit appears to be increasing with the increase of the urine sample volume.

ProteoSpin™ Urine Protein Concentration Midi Kit Contents

1. Wash Solution C
2. Binding Buffer A
3. Elution Buffer C
4. Protein Neutralizer
5. Midi Spin Columns (assembled with collection tubes)
6. Midi Elution Tubes
7. Product Insert

Customer-Supplied Reagents and Equipment

- Centrifuge with a swinging bucket rotor capable of 2,000 x g
- Micropipettors
- 15 mL conical tubes

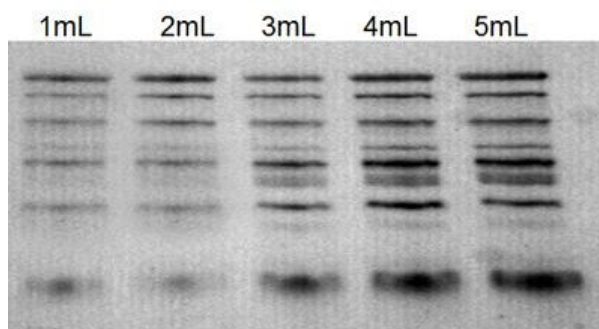


Figure 2. SDS-PAGE Gel Showing Total Proteins Purified from Different Urine Sample volumes using Norgen's Urine Protein Concentration Midi Kit. Five different urine sample volumes were processed using the Urine Protein Concentration Midi Kit according to the bind, wash and elute procedure. The concentrated urinary proteins were eluted in and 10 µL of each elution was resolved on a 12% SDS-PAGE gel and run at 200 V for 75 minutes. The gels were stained using Comassie Blue and pictures were taken using an Alphalmager™ 2200 from AlphaInnotech. As it can be seen, total protein yield increases with the increase of the urine sample volume.

Shipping Conditions

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

Storage Conditions

All solutions should be kept tightly sealed and stored at room temperature. Once opened, the solution should be stored at 4°C. All the reagents should remain stable for at least 1 year in their unopened containers.

Cat #	Description	Quantity
52300	ProteoSpin™ Urine Protein Concentration Midi Kit	10 preps