

DATA SHEET

**Solubilize in SDS. Digest with Trypsin.
Analyze by Mass Spectrometry.****UNIVERSAL SAMPLE PREPARATION FOR PROTEOME ANALYSIS**

Now you can use aggressive, whole proteome solubilization protocols and reagents to prepare proteins from any biological material for trypsin digestion and analysis by mass spectrometry. Based on the Universal Sample Preparation method described by Wisniewski, Zoubman, Nagaraj and Mann¹, Protein Discovery's FASP Protein Digestion Kit enables efficient digestion of samples for proteome analysis, even in the presence of the most extreme contaminating species. This method is the perfect complement to lysis buffers containing strong detergents and reducing agents. As a researcher, you are no longer forced to choose between efficient extraction or digestion. The FASP kit allows you to do both at the highest efficiency.

**PROTEIN DIGESTION
WITH FASP IS:**

- Versatile — Tolerates high concentrations of detergents and salts
- Unbiased — Gene ontology analysis of FASP digestions reveal 42% membrane category proteins for HeLa total cell lysate, and 52% membrane category proteins for brain tissue
- Productive — Enables deep proteome analysis by mass spectrometry
- Easy — The FASP protein digestion protocol is simple and robust

THE FASP FILTER-AIDED SAMPLE PREP METHOD

In FASP, a spin filter forms the basis of a "proteomic reactor" for sample preparation. This proteomic reactor is used to deplete SDS, salts and other interfering substances from the protein sample, alkylate thiols, and digest proteins. Following digestion, peptides are eluted as a concentrated solution. High molecular weight interferences such as DNA remain trapped by the filter, so they stay out of the peptide solution filtrate.

DIGESTS GELFREE® FRACTIONS, TOO

A second protocol, included with the kit, provides instructions for digesting molecular weight fractions produced by the Gelfree 8100 Fractionation System.

REFERENCE

(i) Universal sample preparation method for proteome analysis. Wisniewski JR, Zougman A, Nagaraj N, Mann M. Nat Methods. 2009 May;6(5):359-62. Epub 2009 Apr 19.

ORDERING INFORMATION

To order the FASP Protein Digestion Kit, visit www.proteindiscovery.com to request a quote, or contact Protein Discovery, Inc. by phone, fax, or e-mail.

(T) 865.521.7400 / (TF) 866.670.9038 / (F) 865.521.3548
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DESCRIPTION

FASP Protein Digestion Kit
Contains materials for 8 digestions of up to .25 mg protein each

PART NUMBER

44250