

E3technology™

● Future of Proteomics Starts Here

E3technology™, introduced as a latest addition to the Empore™ E-series is an **efficient, effective, and economical** approach for proteomics sample preparation. Its accessibility makes it suitable for users of any expertise level. It swiftly conducts **protein cleanup**, preparing them for digestion in a matter of minutes, while eliminating detergents and interferences. Significantly, it provides a **cost-effective** solution, and following the cleanup, it seamlessly transitions to the **digestion process** within the same column.

The versatility of **E3technology™** is evident in its diverse formats, such as **E3tip™**, **E3filter™**, and **E3plate™**, accommodating a broad spectrum of sample types in terms of volume, quantity, and size.

The approach is extremely robust, and can reliably process samples ranging from sub-microgram to milligram levels, ensuring reproducibility at a low cost.

E3technology™ exhibits potential for processing rare cells and conducting single-cell proteomics, expanding its utility in proteomic research.

Key Features:

- 1 Universally compatible with various detergents and lysis conditions
- 2 No technical barrier to entry-level and non-experts; stress-free
- 3 Versatile formats and high flexibility
- 4 Multifunctional and integrated platform
- 5 Single-vessel processing and minimal sample loss

Product Features:

- **Efficient:** <15-min hands-on time during cleanup.
- **Effective:** Compatible with a variety of upstream cell lysis conditions (e.g., urea, SDS, RIPA, TFA, etc.).
- **Economical:** Very competitive prices.
- **Robust:** Zero technical barrier to even entry-level biomedical scientists
- **Versatile:** E3tip™, E3filter™, and E3plate™ to satisfy different sample volumes, concentrations, quantities, and the need for automation.
- **Stress-free:** No concerns about solution pH, protein concentration, protein-bead ratios, beads sticking to tube walls and surfaces, cross-contaminations, etc.
- **E4technology:** Enhanced “single vessel” approach for low-cell proteomics. Coming soon.

Product Listings:

Thumbnail	Product Name	Format	Size	Quantity (pcs)	Product Number	Catalog Number
	E3tip™	Pipette Tips	10 µL	25/PKG 96/Case	70-2019-3002-3	6601
	E3tip™	Pipette Tips	200 µL	25/PKG 96/Case	70-2019-3001-1	6601
	E3filter™	Spin Column	500 µL	25/PKG 100/Case	70-2019-3101-0	6701
	E3plate™	96-well plate	1.2 mL	1/PKG 12/Case	70-2019-3201-9	6801

Application Notes:

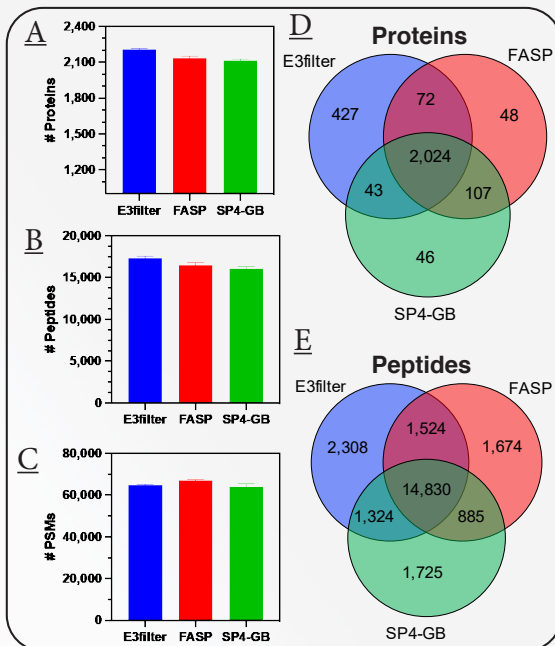


Figure 1. Qualitative assessment of E3technology (E3filter) for E. coli proteome analysis. (A-C) Comparison of the number of proteins, peptides, and PSMs between the E3filter, FASP, and SP4-GB approaches. Error bars represent three replicates. (D-E) Overlapping analyses of proteins and peptides derived from the three methods.

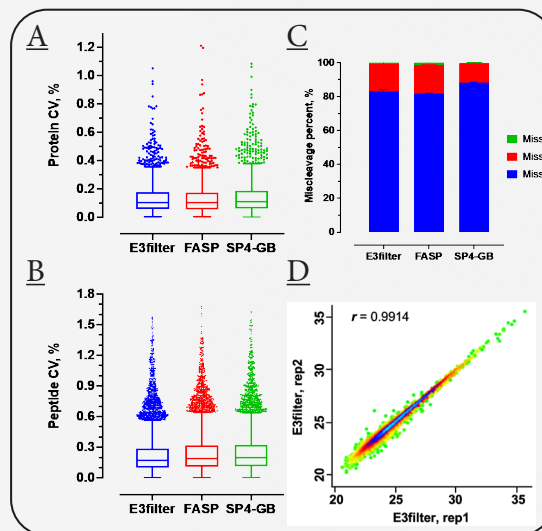


Figure 2. Quantitative assessment of E3technology (E3filter) for E. coli proteome analysis. (A) Coefficient of variation of quantified proteins by the three methods. (B) Coefficient of variation of quantified peptides. (C) Percentages of missed cleavages. (D) Pearson correlation of replicate experiments of E3technology.

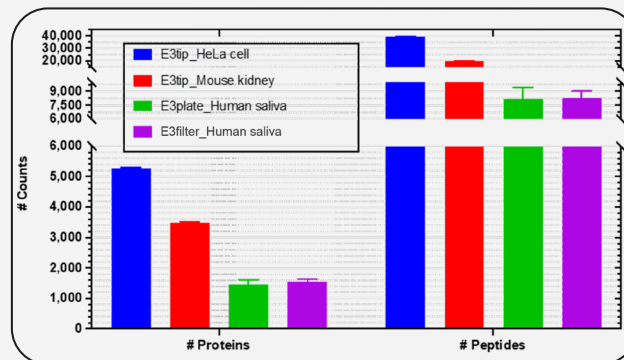


Figure 3. Applying E3technology to various sample types. Mammalian cell (HeLa), tissue (mouse kidney), and body fluid (human saliva) were tested using either E3tip, E3filter, or E3plate. Histograms showed the identification rates of unique proteins and peptide groups. Error bars represent biological replicates.