

Proteopure

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Unraveling the complexity of the cell structure is a vital but challenging task on the pathway to understanding cellular function. Proteins used for proteome analysis are retrieved from isolated cells, whole tissues or bodily fluids and each of these protein sources is comprised of many more components — salts, nucleic acids, lipids and a wide variety of small molecules for instance. The discovery process introduces unwanted elements, such as salts, buffers and detergents to aid in breaking open the cells to release proteins and to otherwise prepare a sample for investigation. But these non-protein components, or contaminants, often interfere with protein separation methods.

“ *The mission of Proteopure is to help proteomic scientists achieve superior results in their research by making each proteomic experiment simpler, faster, and more reliable.*

Proteopure's revolutionary technology is made available through a family of sample preparation kits for protein isolation and recovery, which uses a protein-specific hook to immobilize any protein sample on a resin. The binding of proteins to the resin is reversible, allowing protein recovery following the removal of contaminants.

ProteoHook 2DE Sample Preparation, their first kit, isolates all proteins from contaminants without the need for precipitation and resolubilization. It removes more than 95% of salts, nucleic acids and detergents, including sodium dodecyl sulfate (SDS) an anionic agent commonly used to separate proteins. This enables the use of harsher methods, such as boiling in SDS, for more complete extraction of proteins from cells.

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