

New Products

PROTEIN PREPARATION KIT

The Subcellular Protein Fractionation Kit enables the step-wise preparation of cytoplasmic, membrane, soluble nuclear, chromatin-bound, and cytoskeletal protein fractions with less than 15% cross-contamination in two hours. The resultant samples are ideal for downstream analyses, including Western blotting, protein quantitation, electrophoretic mobility shift, and reporter gene assays. The versatile kit is optimized for use with a variety of tissue types, including liver, heart, brain, kidney, lung, and spleen. The Subcellular Protein Fractionation Kit contains optimized formulations and protocols for the specific protein fractionation of tissues samples, saving researchers time and money. The kit also includes the uniquely designed Thermo Scientific Pierce Tissue Strainer, which quickly separates cells or lysates from tissue debris after mechanical disruption. The device contains a 250 μm mesh filter and fits into standard 15 mL conical tubes. The Pierce Tissue Strainer is also available separately.

Thermo Fisher Scientific

For info: 800-874-3723 | www.thermoscientific.com/pierce

**PROTEASES**

Four new, high quality proteases are now offered: Pepsin, Elastase, Sequencing Grade Arg-C, and Thermolysin. These proteases are provided in a lyophilized format, enabling resuspension in any buffer. Applications include use in peptide mapping and protein identification experiments, and in characterization of posttranslational modifications. Pepsin preferentially cleaves at the C-terminus of phenylalanine, leucine, tyrosine, and tryptophan. Elastase is a serine protease that has a unique capability of digesting elastin, preferentially cleaving at the C-terminus of alanine, valine, serine, glycine, leucine, or isoleucine. Arg-C (clostripain) is a sequencing grade endopeptidase that cleaves at the C-terminus of arginine residues, including sites next to proline. Cleavage also will occur at lysine residues. Thermolysin is a thermostable metalloproteinase with optimal digestion temperature range of 65°C–85°C. Thermolysin preferentially cleaves at the N-terminus of the hydrophobic residues leucine, phenylalanine, valine, isoleucine, alanine, and methionine.

Promega

For info: 608-274-4330 | www.promega.com

PEI TRANSFECTION REAGENT

PEIpro is the next generation of linear PEI (polyethylenimine) transfection reagents for large-scale production of proteins, antibodies, and viral vectors. PEI-based transfection reagent has been specifically developed, formulated, and qualified to meet the needs of scientists working on large-scale transient transfection. PEIpro is a unique, ready-to-use, and cost effective alternative transfection reagent for customers using calcium phosphate or an expensive, unqualified lipid based commercial reagent. The PEIpro transfection reagent is an animal-free product supporting its use in clinical and therapeutic product development and production. PEIpro is fully optimized for the production of recombinant proteins by Transient Gene Expression (TGE) in a wide range of production platforms such as suspension-adapted mammalian cell lines cultivated in shaker flasks, platform shakers, or stirred tank bioreactors. PEIpro can also be used for viral vector production using adherent cell lines cultivated in serum-free culture media.

Polyplus-transfection

For info: +33-(0)-390-406180 | www.polyplus-transfection.com

SERIAL FRACTIONATION

Two-dimensional electrophoresis and mass spectrometry is routinely used for identification of novel proteins. However, the greatest challenge in protein identification is achieving suitable resolution of proteins. The high dynamic range of a species' proteome means that the more abundant proteins mask the less abundant and often more interesting proteins. By fractionation, one simplifies a protein mixture by reducing the amount and the number of protein species to be loaded onto the gel matrix. Fractionation produces less crowded individual protein maps, simplifying analysis and interpretation. G-Biosciences has developed a simple and reproducible method of serial fractionation of total cellular proteins. Fraction-FOCUS utilizes proven technology to fractionate and concentrate all proteomes into multiple fractions. The kit simplifies the protein composition and allows for improved resolution and simplified 2-D maps, which in turn allows for improved analysis and interpretation and greatly increases the chances of identifying novel and less abundant proteins. Fraction-FOCUS is fully compatible with 2-D electrophoresis or isoelectric focusing and other applications.

G-Biosciences

For info: 800-628-7730 | www.gbiosciences.com

GEL IMAGING SYSTEM

The new U:Genius³ is a compact, simple to set up gel-imaging system, which comes with a sensitive 3 megapixel CCD camera inside a compact darkroom. The cost-effective system includes overhead Epi white light and is versatile, offering multiple illumination options to allow high resolution imaging of 1-D DNA and protein gels stained with a range of dyes. The U:Genius³ features a built in processor and a simple to use, intuitive "button controlled" integral key pad. The system can be fitted with the new Ultra-Slim LED Blue Light Transilluminator in laboratories where safety and ultraviolet sample damage are issues. The transilluminator slides out of the darkroom to aid viewing and band cutting, and there is also a white light converter screen option available for scientists wanting to view protein gels, thus maximizing the use of vital laboratory space.

Syngene

For info: 800-686-4407 | www.syngene.com

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Science

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