

## New Products

**Biophotometer**

Building on the strengths of the UV/Vis BioPhotometer, the BioPhotometer Plus features three additional wavelengths, a new keypad design, and the ability to use microliter cells as well as cuvettes. This compact photometer is easy to operate and produces reliable, reproducible results quickly. The three new wavelengths increase the number of routine methods available to 32, compared with 12 for the earlier BioPhotometer; nine of the methods are freely programmable, including measurement of DNA, RNA, and protein concentration; enzyme assays; and the incorporation rate of fluorescent dyes. Additional methods available include the incorporation rate and concentration of fluorescent dyes in nucleic acids or proteins, measurement of enzymatic activities, cell biological assays, and direct measurement at single wavelengths. Both measurement and results calculations, including factoring in dilutions, are performed at the push of a button. Related methods are grouped for easy selection on the redesigned keypad, and differently colored function keys reduce operator errors.

**Eppendorf**

For information +49 40 53801 0  
www.eppendorf.com

**Rapid Conjugation Kits**

The Lynx Rapid Conjugation Kits need just 30 seconds handling time for labeling primary antibodies with a wide range of fluorochromes and enzymes. The one-step labeling technology offers high conjugation efficiency with 100 percent antibody recovery. The kits are suitable for both large and small quantities of antibodies. The Lynx labels are covalently and directionally conjugated to the user's antibody in a controlled process at near-neutral pH, requiring no subsequent desalting steps. This offers significant advantages over traditional labeling methods that need subsequent sample concentration and dialysis, in which antibody loss is a risk and batch-to-batch consistency for experiments cannot be guaranteed. The hands-on time remains 30 seconds whether the user is conjugating microgram or milligram quantities of antibody, so a researcher can do trial runs on conjugated antibodies to optimize the application protocols on a small scale before easily scaling up.

**AbD Serotec**

For information +44 1865 852 700  
www.ab-direct.com

**Complex Peptide Separations**

The NanoLC-Ultra, a new proteomics system that delivers gradient precision at high pressures of up to 10,000 psi, is suitable for the chromatographic separation of complex peptide mixtures. It can be used with longer columns than previous systems and also accommodates columns packed with smaller particles. The NanoLC-Ultra features self-priming and self-purging pumps for easy solvent changes as well as a temperature-controlled column compartment that maintains retention time reproducibility. It can operate in a "peak parking" mode with the flow rate temporarily decreased, to facilitate longer mass spectrometry interrogation of the analyte. By eliminating flow splitting, the proprietary microfluidic flow control technology generates accurate and reproducible flow rates with a resolution of more than 1 nl per minute. The control software includes integration drivers for the most widely used mass spectrometry programs.

**Eksigent**

For information 925-560-2637  
www.eksigent.com

**Protein Separation Unit**

The MF10 Protein Separation Unit simultaneously separates proteins based on size and charge. The technique makes use of a combination of polyacrylamide membranes with a gradation of pore sizes and electrophoretic charges through the buffer. Researchers can choose from a selection of color-coded molecular weight cut-off membranes spanning the range of proteins under investigation. By controlling membranes, buffer pH, and voltage, the MF10 can create up to eight

fractions simultaneously on samples as small as 200 microliters. The two-dimensional polyacrylamide membrane separation technology allows fraction preparation, desalting, and depletion of abundant proteins, upstream of two-dimensional gels or mass spectrometry. The method is nondestructive, so proteins retain their biological activity. The small, affordable system is designed to fill a gap in the proteomics tool arsenal by allowing individual researchers to do a variety of small-scale protein preparations.

**NuSep**

For information 908-575-1378  
www.nusep.com

**Mass Spectrometer**

The LTQ Orbitraps are hybrid linear ion trap mass spectrometers. The LTQ Orbitrap Discovery is a cost-effective system suited for general proteomics and metabolism applications, offering an alternative to time-of-flight systems. Featuring high resolution and accurate mass capabilities, this hybrid liquid chromatography/mass spectrometry system achieves high-throughput, label-free profiling for differential expression while the mass spectrometry capability makes it suitable for small molecule characterization and structural elucidation. The Discovery offers up to 30K resolution power and an exceptional scan rate, enabling the separation of trace-level, isobaric analytes. The LTQ Orbitrap XL is a protein identification and biomarker discovery platform that features sensitivity, rapid scan rate, high mass accuracy, and up to 100K resolution power. The Orbitrap XL features a new collision cell for increased flexibility in fragmentation applications including peptide quantitation, de novo sequencing, and metabolomics research. It is also upgradeable to use the electron transfer dissociation option for controlled dissociation of peptides and proteins.

**Thermo Scientific**

For information 800-532-4752  
www.thermo.com/ms

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