ON THE MARKET

DETECTION SYSTEMS

For dual-channel detection of emitted fluorescence — see MJ Research.

MJ Research introduces an innovative platform for thermal cycling with real-time multicolor detection. Like the company's single-color DNA Engine Opticon system, the Opticon 2 **fluorescence detection system** combines the thermal precision and gradient capability of a 96-well DNA Engine cycler with an innovative optical detector. Dual-channel detection of emitted fluorescence over a broad dynamic range makes the system ideal for applications such as mRNA quantitation with internal controls and allelic discrimination. The DNA Engine Opticon 2 system is compatible with most common fluorescent dye chemistries including SYBR Green I, as well as commercially available detection kits including TaqMan probes and molecular beacons.

Tel. 1-888-735-8437
Fax: 1-617-923-8080
www.mjr.com

DRAQ5 is a novel **cell-permeable anthraquinone** available from Axxora, which is designed for use in a range of fluorescence detection technologies. This pure, synthetic compound has a high affinity for DNA and permits the rapid and convenient staining of nuclear DNA in both fixed and live mammalian cells, accurately revealing chromatin compaction and nuclear architecture, according to the company. DRAQ5's fluorescence signature extends from 670 nm to the low-infrared region of the spectrum and is said to be suitable for excitation by all commercial lasers. Soluble in water at biologically compatible pH, DRAQ5 exhibits rapid uptake into living cells at room temperature and may be added to buffer or culture medium with no need to wash prior to imaging. It is said to show no interference with green fluorescent protein (GFP) or other visible dye ranges.

Tel. (+1) 858-550-8830
www.axxora.com

KITS

The InnoGenex IHC kit for rodent tissues is specifically designed for **immunohistochemical staining of tissues** from species closely related to the primary antibody-producing species. The biotinylated secondary antibodies have been treated by solid-phase adsorption against protein extracts from mouse, rat or rabbit tissues to eliminate cross reactivities and produce clean results with very low background. The company says that serial amplification allows very high sensitivity, retaining the high specificity inherent to the antibody–antigen and biotin–streptavidin interactions. Matched detection reagents and protocols produce maximal signal-to-noise ratios. For maximum convenience and reproducibility, reagents are supplied in a pretitrated, ready-to-use format in precision dropper bottles.

Tel. (+1) 925-543-1400
www.innogenex.com

SCAVENGER HUNT

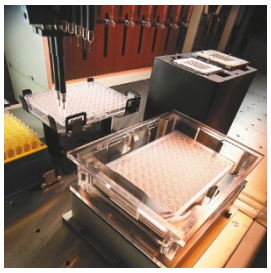
The Fluovac **isoflurane/halothane scavenger system** from Stoelting allows continuous flow gas anesthesia and protects the researcher from exposure during surgery. The device recaptures the escaping gases by vacuum and draws them through a disposable Fluosorber filter canister, which is said to effectively remove all anesthetic. Any gas anesthesia system connects directly to the Fluovac. The disposable filter, ordered separately, will absorb 200 g of isofluorane or halothane. The Fluovac is suitable for labs without fume-hood ventilation and is supplied standard with a double rodent mask. Masks for guinea pigs, cats and rabbits are available separately.

Tel. (+1) 630-860-9700
www.stoeltingco.com/physio

PROTEOMICS

ProteomeLab PF 2D from Beckman Coulter is an **automated, two-dimensional fractionation system for high-resolution analysis of complex protein mixtures**. In the first dimension, chromatofocusing separates the proteins according to their pI, providing information that can be related to traditional isolelectric focusing techniques. Fractions from the first dimension are collected and automatically injected into a second dimension, which separates on the basis of hydrophobicity. ProteomeLab PF 2D software displays both one- and two-dimensional maps of the expressed protein profiles in easy-to-read formats. The company says that the PF 2D system addresses many of the problems associated with traditional proteomics research such as detection of low abundance proteins, run-to-run reproducibility, quantitation, detection of membrane or hydrophobic proteins, detection of basic proteins and detection of very low and very high molecular weight proteins. The automated system is also designed to require less time and manpower than traditional, labor-intensive techniques.

Tel. (+1) 714-871-4848
www.beckmancoulter.com



Millipore's ZipPlate Micro-SPE plate.

Millipore offers the ZipPlate Micro-SPE Plate. The multiwell device is a 96-well sample preparation **tool that can be used to perform both in-gel digestion and sample preparation prior to mass spectrometry**. The ZipPlate device is the first one in a series of sample preparation products being developed as part of the Proteomics Partnership between Millipore and Applied Biosystems. Today, most labs digest protein-containing gel slices in a centrifuge tube and then purify the resulting peptides using a ZipTip pipette tip or other purification device. The ZipPlate system has 300 nl of C18 media immobilized at the bottom of each well, so samples can be digested, desalted, and concentrated without being transferred between devices. As a result, sample processing is streamlined and coverage is enhanced. Eliminating sample transfers also saves time. With ZipPlate devices, up to 96 samples can be processed in just 7 h, compared to 16 h with current methods, says Millipore. In addition, the plate is compatible with existing liquid handling systems. The ZipPlate Micro-SPE plate is available in ten packs or as part of the Montage In-Gel Digest$_{ZP}$ Kit.

Tel. 1-800-MILLIPORE
www.millipore.com/discoveryproteins