

New Products

Multiplex Assays



Product: A suite of multiplex assays that use magnetic beads.

Name & Manufacturer: Milliplex MAG kits from Millipore.

Technology: Milliplex MAG kits include microspheres embedded with superparamagnetic particles. Once bound to the protein of interest, the microspheres can be magnetically separated. Designed for use with Luminex xMAP technology.

Advantages: Magnetic separation makes sample preparation easier and eliminates the risk of sample loss, clogs, or leaks. The kits also reduce non-specific binding, which results in lower, more consistent coefficients of variation. Both the magnetic and non-magnetic Milliplex kits use the same protocols and components (except for the beads), so researchers do not need to re-optimize their methods when switching from one format to another.

More Information:

www.millipore.com/drugdiscovery/dd2/mag

Sensitive fluorescence detectors



Product: Series of fluorescence detectors Ultra-high sensitivity detecting trace-level compounds.

Name & Manufacturer: RF-20A and RF-20Ax from Shimadzu.

Technology: The detectors complete the prominence LC / UFLC families with ultra-high sensitivity and fast LC capabilities. The RF-20A and -Ax series are based on a newly developed optical system. They offer a dual-channel mode and a data acquisition speed of up to 100 Hz, enabling ultra-fast analysis of just 10 ms response and an ultra-high sensitivity. They serve applications requiring lowest possible detection limits.

The high-end RF-20Ax provides a cell temperature control with cooling function. It ensures a constant detector cell temperature leading to excellent reproducibility without any loss of sensitivity. Furthermore, the RF-20Ax supports automatic validation of the wavelength by a built-in Mercury lamp. This feature supports multiple components analysis.

Advantages:

- Ultra-high sensitivity detecting trace-level compounds
- For fast LC and ultra-fast analysis
- Easy maintenance reduces running costs

More information: www.shimadzu.eu

RT in vivo Optical Imaging System

Pearl Imager
Impulse



Product: Laser-based real time *in vivo* optical imaging system.

Name & Manufacturer: Pearl Impulse Imager from LI-COR Biosciences.

Technology: The Imager provides real-time imaging of vasculature, lymphatics and other compounds flowing through an animal's system. LI-COR now offers two Pearl *in vivo* imaging systems that feature sensitivity, speed, and resolution for near-infrared imaging. The systems are optimized for use with LI-COR IRDye Infrared Dyes for NIR imaging at 700 and 800 nm.

Combining the LI-COR Pearl Impulse's high resolution imaging with the Pearl Impulse's real-time imaging, agents can now be visualized not only as they accumulate in a tumor, but also as they move in real-time through the vasculature or lymphatic system prior to arriving at the tumor. The Pearl platform is cost-effective and uses laser illumination and dual channel, near-infrared detection for sensitivity combined with the simplicity of one-button image acquisition and a user friendly software. Signals can be detected in less than 20 seconds and the new real time imaging feature of the Pearl Impulse offers

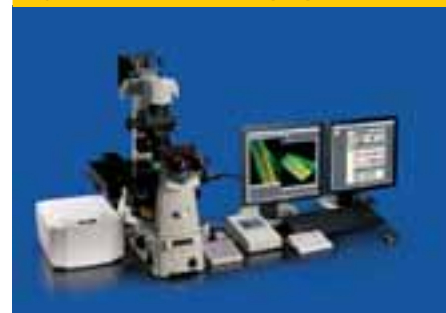
signal detection for up to 2 images per second. The Pearl Impulse Imager features a compact footprint (W/D/H: 41 x 41 x 66 cm) for space-conscious labs and portability. The patented CCD camera was specifically developed by LI-COR for the optimum detection of IRDye Near-Infrared fluorescent dyes. With six logs (22 bits) of dynamic range available for each image an ideal image is captured every time, independently of the signal intensity within the animal.

More Information:

gmbh@licor.com

www.licor.com

Dynamic live cell imaging



Product: High speed multiphoton microscope system.

Name & Manufacturer: A1R MP Multiphoton and Confocal microscope system from Nikon.

Technology: Nikon's A1R MP is a multiphoton imaging system featuring a high resolution galvanometer scanner and a high speed resonant scanner that is capable of frame rates from 30 fps at 512 X 512 pixels to as fast as 420 fps in band scan mode. New four channel non-descanned multiphoton detectors with higher sensitivity, reduced dark current and broad spectral range allow for real time unmixing of closely spaced probes for deep tissue and accurate, high contrast spectral imaging. This is important in multiphoton imaging because of the overlap of emission spectra of probes and autofluorescence, which is often unavoidable when using a single laser line.

Advantages: The A1R MP Multiphoton and Confocal microscope system was launched for high speed, high resolution and high sensitivity multiphoton excitation and confocal fluorescence imaging. By combining multiphoton imaging and resonant scanning, the A1R MP can image deep within a specimen and image at video rates for full frame images or even faster for 32 line band scans. Thus the A1R MP allows for deeper, faster and sharper imaging, while remaining cell-friendly with fast resonant imaging.

More Information: www.nikoninstruments.eu/A1R-MP-Multiphoton-Confocal