Automated Microarray Processing

The QuadChamber is for automated processing of four different microarrays simultaneously on one slide using the HS Pro automated hybridization station. The QuadChamber was developed for use with Agilent's new 4 x 44 4-Plex Gene Expression as well as CGH Microarrays, which consist of four individual, whole-genome microarrays printed on a single glass slide. It is the first fully automated system that can independently handle four arrays on one slide with no cross-contamination between the arrays. The QuadChamber provides a sealed environment around each of the four arrays on Agilent's 4-Plex slides, with independent channels for wash buffers, independent agitation mechanisms, and independent drying.

Tecan Group
For information +41 44 922 81 11
www.tecan.com

HILIC Chromatography Columns

A new line of Luna HILIC (hydrophilic interaction liquid chromatography) columns for the analysis of polar metabolites in drug discovery and development delivers superior retention of polar compounds, increases mass spectrometry sensitivity, and increases laboratory throughput. The new columns retain a water-enriched layer on the surface of the silica that facilitates the transfer of polar compounds into the stationary phase for increased retention. Low-level polar metabolites and impurities have historically slowed development and negatively affected mass spectrometry sensitivity, and the new columns offer advancements in the separation, quantitation, and qualification of difficult-to-retain polar compounds.

Phenomenex
For information 310-212-0555
www.phenomenex.com

Antibody-Free Immunoprecipitation

The HaloCHIP System is the first antibody free alternative to chromatin immunoprecipitation (ChIP). ChIP is used to determine where, in vivo, a given protein binds to DNA. The major challenge of the ChIP method is the requirement for highly specific antibodies for each protein to be tested. In addition to working without the use of antibodies, the HaloCHIP system delivers results in less time than a standard ChIP (two days vs. four days). The new system also improves signal-to-noise ratios, enabling higher sensitivity for detection of even small changes in protein binding patterns from a reduced number of cells. The system is based on the HaloTag reporter protein, which has been engineered to form a covalent interaction with a series of specific ligands, including one for immobilization, HaloLink Resin. In HaloCHIP, DNA-binding proteins of interest are expressed in cells as HaloTag fusion proteins, cross-linked to DNA with formaldehyde, and then covalently captured on HaloLink Resin. After the captured complexes are washed to remove any nonspecific interactions, cross-links are reversed, and the specific DNA is released for downstream analysis.

Promega
For information 608-274-4330
www.promega.com

Spectrometer Family

The DNS spectrometers offer performance and flexibility at an affordable price. The series runs from the compact, short-focal-length DNS-150 with 0.4 nm resolution through the DNS-750, with a 0.03 nm resolution. All DNS systems support interchangeable grating turrets and are designed to provide high levels of mechanical stability and repeatability. It is easy to configure the DNS spectrometer with popular charge-coupled device cameras, including the MOSIR series; single-point detectors are also supported.

Intevac
For information 408-588-2150
www.intevac.com

Automated Cell Culture

The Vi-CELL XR Cell Viability Analyzer has been integrated with Biomek laboratory automation workstations and other devices for real-time cellular imaging in a walk-away system for cell culture settings. The Vi-CELL XR measures the viability of cells and counts them in minutes, using the widely accepted trypan blue cell viability tissue culture protocol. The instrument measures 15 to 30 times more volume than competitive systems in the same amount of time, with a more comprehensive array of parameters, according to the manufacturer. The automated, integrated system monitors cell growth over time.

Beckman Coulter
For information 714-993-8955
www.beckmancoulter.com

Plant DNA Extractions

QuickExtract Plant DNA Extraction Solution can be used to obtain genomic DNA ready for polymerase chain reaction (PCR) from most plant samples using a simple eight-minute protocol with two sequential heating steps. Most leafy plants are amenable to DNA extraction using the system. The method allows for the processing of samples without centrifugation, spin columns, or any toxic organic solvent. The resulting extract can be used for standard endpoint or real-time PCR applications.

Epicentre Biotechnologies
For information 800-284-8474
www.EpiBio.com

Electronically submit your new product description or product literature information! Go to www.sciencemag.org/products/newproducts.dtl for more information.

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