

# NEW PRODUCTS

<http://science.labvelocity.com>

## Small Nucleic Acid Purification

The innovative flashPAGE Fractionator System is a new electrophoresis device for the rapid, streamlined purification of small nucleic acids, such as small interfering-RNAs and microRNAs. Unlike traditional polyacrylamide gel electrophoresis (PAGE), which was optimized for detection only, the new system is designed for the purification of these small molecules. With this system, scientists can save nearly an entire day of labor by purifying small RNA and DNA molecules in about 12 min. The flashPAGE purification system makes use of an electrical current to drive nucleic acids through a proprietary denaturing gel matrix and buffer system and into the lower buffer collection chamber. This chamber is designed for retention of eluted material, isolating highly purified nucleic acids for sensitive downstream investigation.

**Ambion** For information 800-888-8804 [www.ambion.com](http://www.ambion.com)

## Protein Coupling Kits

Two new kits make small-scale affinity purification of antibodies and other proteins easier to perform. The two kits make use of reliable chemistries for covalent attachment of amine- or sulfhydryl-containing molecules. The MicroLink Protein Coupling Kit provides a complete set of reagents for the small-scale coupling of protein via amine groups and spin column purification of target molecules. The kit is suitable for coupling small amounts (25 to 100  $\mu\text{g}$ ) of protein. The MicroLink Peptide Coupling Kit provides a complete set of reagents for the small-scale coupling of peptides or other molecules containing sulfhydryl groups and spin column purification of target molecules.

**Pierce** For information 800-874-3723 [www.piercenet.com](http://www.piercenet.com)

## Array Designer

Version 4 of Array Designer is software for designing specific and efficient oligonucleotides for microarrays for the challenges of the post-sequencing era. This desktop tool can design hundreds of specific oligonucleotides for complementary DNA microarrays for expression studies or single nucleotide polymorphism (SNP) genotyping. The new version includes the ability to make whole genome arrays and tiling arrays. With Array Designer, the user can start with a list of sequences or a whole genome sequence (for whole genome arrays) to study the entire organism by detecting every gene or exon in the whole genome, characterizing transcriptomes, discovering differentially or alternatively spliced transcript, SNP discovery and genotyping, DNA sequence variation in individuals or populations, splice variant assays, and comparative genome hybridization.

**Premier Biosoft International** For information 650-856-2703 [www.premierbiosoft.com](http://www.premierbiosoft.com)

## Fast Filter Wheel

The U\_FFOW is a fast observation filter wheel suitable for certain cellular observation techniques on the molecular level, such as fluorescence resonance energy transfer, quantum dot applications, and dual-

emission imaging. Designed for use with the Olympus cell<sup>^</sup>R and cell<sup>^</sup>M high-end research imaging station for live cell microscopy, the new fast observation filter wheel has a minimal switching time of just 58 ms. This speed is essential for time course investigations of rapid intracellular events that require the acquisition of several images per second with observations made at different wavelengths.

**Olympus** For information +49 40 2 37 73-5426 [www.olympus-europa.com](http://www.olympus-europa.com)

## Chemical Inkjet Printer

The ChIP 1000 Chemical Inkjet Printer is a new tool for proteomics analysis (peptide fingerprint mapping), protein microarray analysis, and nano-western analysis. The ChIP rapidly and reproducibly dispenses picoliter volumes of reagents to defined locations on poly(vinylidene fluoride) (PVDF) membranes, allowing for multiple micro-chemistries on specific western blot spots or bands (from one- or two-dimensional gel electrophoresis), opening new horizons for microscale protein research and repeated analysis. This is accomplished through a piezoelectric reagent delivery system, which includes four independent channels for deposition of multiple chemistries or matrix-assisted laser desorption ionization-time of flight matrices to a stationary support. For the first time, micro-scale on-membrane digestion can be rapidly generated without the time-consuming procedures of in-gel digestion, peptide extraction, and C18 cleanup steps.

**Shimadzu** For information 800-477-1227 [www.shimadzu-biotech.net](http://www.shimadzu-biotech.net)



## Competent Cells

Express BL21(DE3) Competent Cells offer high efficiency cloning and a high level of protein expression in the same cell. With a transformation efficiency of  $\geq 5 \times 10^9$  cfu/ $\mu\text{g}$ , *E. coli* Electro-competent Cells eliminate the need to transfer plasmids from a cloning strain into an expression strain. Increased recombinant yields allow fast production of complex expression libraries using any T7 expression vector.

**Lucigen** For information 608-831-9011 [www.lucigen.com](http://www.lucigen.com)

## Literature

*Cellular Analysis Catalog* offers more than 3,200 products, including 1,800 new animal antibodies, a unique menu of major histo-compatibility complex tetramers for T-cell research, cell signaling reagents, and multi-

plex bead assays. These reagents meet the needs of a wide range of research applications using flow cytometry and imaging.

**Beckman Coulter** For information 800-742-2345 [www.beckmancoulter.com](http://www.beckmancoulter.com)

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# Science

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