

### CELL COUNTER

Designed for laboratories that routinely work with cells tagged with a large variety of fluorescent labels, the new Cellometer Vision allows users to easily change out either of the two fluorescence optics modules in the instrument and replace it with another one. This enables scientists to perform experiments using their choice of fluorescent labels, with a broad spectrum of excitation and emission wavelengths from ultraviolet to red. Using proprietary patent-pending image processing and data analysis algorithms, Cellometer Vision combines brightfield microscopy and one or two fluorescence colors to count and analyze cells that are loaded into a disposable chamber. A wide variety of fluorescent dyes may be used to stain the cells, providing clear declustering of the cells to generate reliable viability results.

Nexcelom Bioscience

For info: 978-327-5340 | [www.nexcelom.com](http://www.nexcelom.com)



### LIVER MICROSOMES

A comprehensive range of liver microsome products from over 12 species, including mouse, rabbit, monkey, and chicken is now available. Researchers can select from pure microsomes or S9 fractions, or animal liver cytosol. In order to facilitate requirements recommended by REACH, bespoke microsome products from other species or strains can also be supplied. Microsomes are a valuable tool for investigating drug metabolism and examining in vitro drug-drug interactions. They are produced by mechanically homogenizing cells to fragment the endoplasmic reticulum, the fractions of which reform into microsomes and are collected via differential centrifugation. During this process, the numerous different phase I cytochrome P450 enzymes are concentrated within the microsomes. The S9 fraction contains microsomes as well as cytosolic phase II metabolism-related enzymes.

Sera Lab

For info: +44-(0)-1444-250010 | [www.seralab.co.uk](http://www.seralab.co.uk)

### CLOUD COMPUTING

FieldAlign V3.0 is the latest in Cresset's new generation of cloud-enabled applications, which support parallel, distributed computing by default. It can be deployed both as a traditional desktop application and as a command-line application distributed onto large computing servers. FieldAlign is a powerful molecular design and 3D structure-activity relationship (SAR) tool that generates biologically relevant molecular comparisons, which can be used to find the root causes of activity or inactivity. FieldAlign helps chemists to gain detailed understanding of the SAR of their lead molecules and to use this to design the best next synthesis. FieldAlign V3.0 introduces a range of user features that improve productivity and customizability. Its command line interface supports scripting and workflow systems, and is now available on Windows, Linux, and Mac platforms. It incorporates a new molecule table enabling filtering and sorting of lead molecules, using imported data or standard physical properties such as wLogP, TPSA, and Rule of Five violations.

Cresset Group

For info: +44-(0)-1707-356120 | [www.cresset-group.com](http://www.cresset-group.com)

### RNA, DNA, AND PROTEIN ISOLATION

Tri-Xtract is a convenient, ready-to-use reagent designed for the isolation of total RNA, DNA, and protein. Tri-Xtract is suitable for the isolation of total RNA from small quantities of tissues and cells from human, animal, plant, yeast, bacterial, and viral origin. Tri-Xtract is

a monophasic solution of phenol and guanidine thiocyanate that maintains the integrity of the RNA during cell disruption and homogenization. The isolation procedure takes less than an hour and the isolated RNA is suitable for Northern blots, dot blot hybridization, in vitro translation, RNase protection assays, and poly (A+) selection.

G-Biosciences

For info: 314-991-6034 | [www.gbiosciences.com](http://www.gbiosciences.com)

### FULL-LENGTH HUMAN PROTEINS

The new range of over 4,000 full-length, affinity-purified human proteins, which are expressed in HEK293 cells and derived using an extensive collection of human cDNA clones, is currently the broadest offering of human proteins produced in human cells. It has been prepared to ensure optimal preservation of protein structure, posttranslational modifications, and function. All full-length proteins come affinity purified and are guaranteed to be greater than 80% pure, making them ideal for use as native antigens for optimized antibody production, positive controls in antibody assays, enzyme-linked immunosorbent assay standards, protein-protein interaction experiments, in vitro biochemical assays, cell-based functional assays, and SRM/MRM standards. All the human proteins in the new range are available in small trial-size quantities, which can be quickly developed into larger (milligram) quantities.

AMS Biotechnology

For info: +44-(0)-1235-828200 | [www.amsbio.com](http://www.amsbio.com)

### FREEZE-DRYER AND LYOPHILIZATION SYSTEM

The latest freeze-drying and lyophilization innovation for improving process control and minimizing issues of scale-up, the LyoStar 3, is configured with the most innovative controls and instrumentation, including Smart Freeze-Dryer Technology and Praxair's ControLyo On Demand Nucleation Technology. The LyoStar 3 is the ultimate lab-scale system for formulations studies, process optimization, and scale-up work. The system is a freeze-dryer that provides unmatched process accuracy, reliability, and unique ease-of-use features. Until now, the freezing step of lyophilization was uncontrolled due to the random nature of the nucleation or crystal-forming process. Using ControLyo technology on the LyoStar 3 now makes nucleation control a reality by regulating the nucleation temperature to within 1°C of its freezing point. The results are improved product uniformity, quality, and yield.

SP Scientific

For info: 845-255-5000 | [www.spscientific.com](http://www.spscientific.com)

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# Science

## New Products

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