

# Product News

## Stereomicroscope



The new **Carl Zeiss stereomicroscope Stemi 2000-CS** allows the user to view the sample whilst other observers view the procedure by video. Greenough type stereomicroscopes create their

stereo effect by having separate light paths set at different angles, one for each eye. However, when video or photomicrography is being carried out most stereomicroscope systems remove light from one of the light paths within the body of the microscope, leaving only one viewing path. This can make it difficult to demonstrate a process to video viewers. The problem can be overcome with the Stemi 2000-CS, which splits light from the right hand viewing path 50:50 between the viewer and the camera port, whilst also adjusting the brightness in the left hand path to balance the light levels between the eyes. The equipment can be used with a range of accessories.

Circle number 1 on reader response card

## Temperature cycler

The **RoboCycler® Infinity™** temperature cycler from **Stratagene** is the newest addition to the Robocycler temperature cycler product line. The Robocycler Infinity cycler combines features and benefits of the standard RoboCycler temperature cycler with the added flexibility of interchangeable blocks. Unlike conventional temperature cyclers that have only one block for PCR denaturation, annealing and extension steps and must ramp a single block's temperature up and down, every RoboCycler temperature cycler features four programmable thermal blocks and a robotic arm that rapidly moves samples from one pre-equilibrated block to another. This allows a 30% reduction in sampling time. Another key feature of the RoboCycler system is a  $\pm 0.1^\circ\text{C}$  well-to-well temperature uniformity. Easily interchangeable blocks add versatility while an independent hot top assembly allows oil-free PCR amplifications.

Circle number 2 on reader response card

## Electrophoresis monitoring

A new reagent that now enables the accurate determination of protein molecular weights between 10 kDa on a single gel has been developed by **Amersham Life Science**. The **Full Range Rainbow™** coloured protein molecular weight markers are visible during electrophoresis, enabling easy monitoring of experimental progress. The bands are also visible when transferred to blotting membranes, so the size estimation of unknown proteins is also straightforward. Developed using recombinant standard proteins, rather than naturally-sourced proteins, to ensure tighter bands, the molecular weight range ensures that a ladder of evenly spaced, discrete bands is obtained. Supplied in ready-to-load format, the 10 marker proteins are each labelled with a differently coloured dye, enabling simple visual identification. The markers provide sufficient material to run 50 mini gels, or 25 large gels.

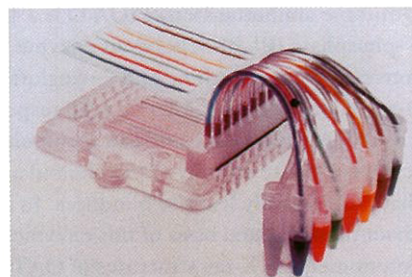
Circle number 3 on reader response card

## Affinity purification

A new, high-capacity biosensor cuvette for rapid affinity selection, purification and recovery of biomolecules is now available from **Affinity Sensors**. **CMD-Select cuvettes**, used with the **IAsys Auto+** biosensor system, allow biomolecule selection based on specific binding to immobilized ligand from complex mixtures, including total bacterial extracts and cell culture media. The unique high surface area cuvette and ease of liquid handling allow the convenient elution of comparatively high levels (up to microgram amounts) of bound analyte. The purified analyte is therefore easily characterized by conventional polyacrylamide gel electrophoresis (PAGE) or by mass spectrometry (MS).

Circle number 4 on reader response card

## Gel eluter



The new **whole gel eluter** from **BioRad** harvests protein bands from cell extracts separated by polyacrylamide gel electrophoresis (PAGE). The electro-elution tools collect all the proteins from an entire uncut gel, placing the content of each band into a separate well for subsequent sequencing, assay or antibody production. The instrument is ideal for screening milligram amounts of protein mixtures in cellular assays or for characterising T-cell and antibody responses. Antigenic fractions are obtained in non-toxic form, making the assays fast and easy. The whole elution process takes 14–21 minutes on a 3mm thick gel.

Circle number 5 on reader response card

## Rotary microtome



The new **Leica RM 2165** automatic, heavy-duty microtome has an advanced step motor that permits an exact specimen feed and reproducible sectioning results. Features include 70 mm vertical stroke length, unique step trim function, and programmable specimen retraction. Technical features include a handwheel rocking sectioning mode; the motorized specimen feed can be linked to change the handwheel turning direction. Thus, the manual sectioning mode allows the user to trim the specimen by handwheel rocking in addition to the standard trim function. For safety, the Leica RM 2165 integrates two locking systems. The handwheel is easily locked in any position via a quick locking system, or sectioning can be interrupted by pushing a button on the control panel.

Circle number 6 on reader response card

## New plasma

A new quality control plasma with 12 hour reconstituted stability at room temperature now enables use over multiple shifts, reducing reagent wastage. In addition to its longer stability, the **Lyphocheck® Coagulation Control**, from **Bio-Rad**, is designed to give unbiased assessments of citrated coagulation systems as it can be optimised for individual methods and reagents. Lyphocheck has three levels of testing: level 3 has values for prothrombin time and activated partial thromboplastin time exceeding those obtained with fresh, healthy citrated plasma; level 2 has values slightly lower; and level one has values similar to those of fresh, healthy citrated plasma. Lyphocheck has a shelf life of 2 years.

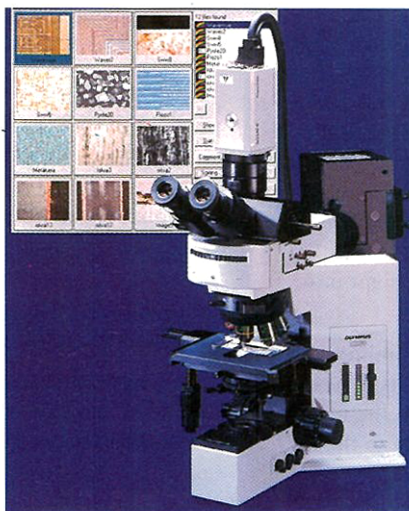
Circle number 7 on reader response card

## Expression vectors

Recombinant protein expression in bacterial systems often leads to the protein of interest having a deleterious effect on the host during the growth phase of expression. **Invitrogen's** new **pBAD/His** and **pBAD/Myc-His bacterial expression vectors** offer regulated dose-dependent control from the promoter of the arabinose operon and simple purification of recombinant protein via nickel-chelating resins such as **ProBond™**. The pBAD vectors can achieve very low levels of uninduced expression through glucose-catabolite-dependent repression. This repression is mediated by cAMP levels and can be especially useful when the gene of interest is extremely growth inhibitive to the bacterial host.

Circle number 8 reader response card

## Microscopy image archiving



A new system for microscopy image analysis and archiving has been developed by **Olympus** and **Soft Imaging Software** for use with Olympus microscope systems.

**AnalySIS Docu** also allows image processing, interactive measurement and process automation via macros. A video camera mounted on the microscope delivers an analogue image signal that is digitised by a frame grabber board in the PC, displayed in real time on the PC monitor and stored on PC in hard disk or other bulk storage media.

Circle number 9 on reader response card

In Brief

## Hybridization oven



**Hybaid** have launched the **Spin 'n' Stack hybridization oven** with an accessory for whole mount *in situ* hybridization. The tilting wheel accessory enables whole mount samples to be rotated at variable speeds between 5–20 rpm and at adjustable tilt angles between 0–180°C. These two provisions allow for the use of minimal solution volumes and provide the gentle mixing action required for fragile whole mount samples.

Circle number 10 on reader response card

## RNA size markers

**Ambion's Millenium™ Markers** are designed to give accurate size determinations of single-stranded RNA molecules in any northern blot analysis. This mixture of *in vitro* transcribed RNA transcripts may be stained with ethidium bromide during or after electrophoresis. After transfer to a membrane, the markers may be visualized with methylene blue or probed with labeled  $\lambda$  sequence to generate a signal on film. Millenium™ Markers are also available in a biotinylated format for non-isotopic detection.

Circle number 11 on reader response card

## CD spectrometer

The **OLIS RSM CD spectrometer** uses two orthogonally polarized light beams to obtain direct CD measurements while subtracting out interfering signals. The system's monochromator provides conventional slow-scanning and fixed-wavelength data collection modes plus a rapid-scanning mode, in which dual-beam, phase-coherent CD spectra are collected at subsecond rates. Powerful software displays the difference between the sample's absorbance of right and left circularly polarized light ('CD'), the rate at which each species in the sample is changing, and the CD spectra of each species.

Circle number 12 on reader response card

## Scintillation cocktail

**Unisafe-1** is a new universal scintillation cocktail from **Zinsser Analytic**. Unisafe-1 is based on a solvent that is acknowledged to be the safest available for scintillation work, making Unisafe-1 an ideal replacement for universal scintillators based on xylene or pseudocumene. Unisafe-1 has a much higher sample capacity and does not form gels. It has low viscosity and mixes easily with the sample.

Circle number 13 on reader response card