

New dimensions in electrophoresis

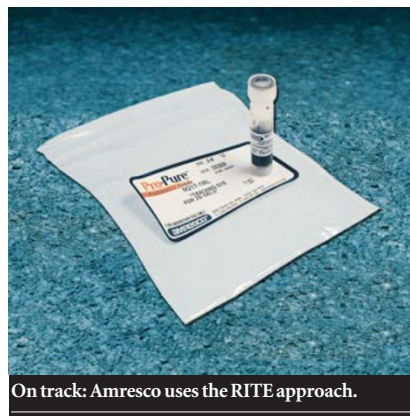
Means of detection, data analysis and gel imaging.

2D tracking dye

Amresco www.amresco-inc.com

One to pursue

Amresco's 2D tracking dye is intended for use in two-dimensional polyacrylamide gel electrophoresis, in particular the company's 2D RITE-Gels. The dye accurately follows the progress of the second-dimension gel during electrophoresis. It is supplied pre-mixed and ready to use.



On track: Amresco uses the RITE approach.

Zetalif

ESA Analytical www.esainc.com

Detecting not a lot...

The Zetaliflaser-induced fluorescence detector monitors HPLC and capillary electrophoresis eluants down to zeptomoles for some compounds. That's sextillionths, or $\times 10^{-21}$ M. Zetalif uses monochromatic laser sources to detect trace levels of compounds with sensitivity claimed to be typically 100–1,000 times that of traditional fluorescence detection. The 14 operational wavelengths range from 266 to 785 nm and measurement is over a linear dynamic range of 3–4 orders of magnitude. The detector can connect to most HPLC, micro-HPLC, capillary LC, capillary electrophoresis and CEC systems.

AccuFLOWGel

Flowgen www.flowgen.co.uk

Band aids for electrophoresis

AccuFLOWGels are pre-mixed solutions, available in 30% or 40% concentrations, for protein and nucleic acid electrophoresis. AccuFLOWGel 19:1 is best suited for separating fragments below 100 bp. It contains 19 g acrylamide per g methylene bisacrylamide (MBA) cross-linker and provides a base solution for gels for automated sequencers. Urea can be added to the solution immediately prior to use. AccuFLOWGel 29:1 contains 29 g acrylamide per g MBA and is suitable for separating fragments of 100–1,000 bp. Applications include denaturing PAGE-DNA/RNA, gel electrophoresis of PCR products, ribonuclease protection and DNA sequencing.

E-Gel 96

Invitrogen www.invitrogen.com/egels

Staggering speed

E-Gel 96 is a pre-cast, robot-compatible agarose electrophoresis system that automates high-throughput analysis of multiple DNA samples. It uses staggered-well technology to perform simultaneous analysis of 96 samples in 12 minutes.

GeneDirectory

Syngene www.syngene.com

Look through any window

The GeneDirectory data storage and analysis program works in conjunction with Syngene's GeneTools. It can be used to compare thousands of bands on different gels. Data can be viewed on screen as familial gel tracks, with up to five gel tracks containing DNA from known samples in an upper window and the bands on the gel to be compared in a lower one. The software offers three ways to compare data, ranging from simple band comparison to co-dominance and dominance analysis for RFLP and AFLP studies, forensic work or gene mapping.

ReadyStrip

Bio-Rad www.bio-rad.com

Go to great lengths

Bio-Rad has added an 18-cm immobilized pH gradient strip to its ReadyStrip product line for the first dimension of two-dimensional gel electrophoresis. The strips are permanently labelled to mark the anode and the pH range. ReadyStrips are available in broad, narrow and micro ranges, as well as a 6.3–8.3 range, in lengths of 7, 11, 17 and 18 cm. Applications include studying a well-characterized protein, mapping the proteome and isolating a large quantity of protein.

Model 5005 Mini Chiller

PolyScience www.polyscience.com

A cool response

The model 5005 mini-chiller from PolyScience combines the compact size of a circulator with an extended temperature range of -5°C to 50°C . Small enough to be placed on the bench top or under the bench, the 5005 offers up to 450 watts of cooling at 20°C . A

sealed plumbing system allows use in closed or open loop applications, and a microprocessor delivers the correct amount of refrigerant to handle the incoming heat load. The chiller is suitable for electrophoresis cell cooling, small bioreactors and general laboratory processes.

200 Series gas chromatograph

Cambridge Scientific Instruments

www.camsci.co.uk

Modern times

The 200 Series gas chromatograph is billed as an inexpensive way of replacing ageing gas chromatography systems. It provides the facilities and performance needed for most QC/QA or teaching applications, with minimal bulk and power consumption. A temperature-controlled, capillary gas chromatograph with split/splitless injector, FID and electronic gas control, the 200 Series GC has a footprint of 41×34 cm, weighs 7 kg and uses 700 watts of power.

Hydraplus autosampling system

Analytical Technologies

www.analyticaltechnologies.co.uk

Special delivery

The upgraded Hydraplus autosampling system is designed to automate the Hydrasys multiparameter electrophoresis system in clinical laboratories. The Hydraplus delivers precise micro-volumes of sample directly from primary tubes to four sample applicators in a built-in humidity chamber. Dilution ratios of actual concentrations can be pre-programmed and samples can be tracked from primary tube to sample applicator and gel through to the final result.

These notes are compiled in the Nature office from information provided by the manufacturers.