

Ultramicrotome for Electron Microscopy

The MT-7 Ultramicrotome is the thin sectioning of specimens for materials science and life sciences applications in analytical electron microscopy. Normally used in conjunction with a diamond knife, the MT-7 can produce single or serial sections from 10 nm up to 10 μM in thickness in 1-nm



increments. With a powerful driven cutting stroke and microprocessor-controlled mechanical specimen advance, the MT-7 makes light work of sectioning ceramics, superconductors, metal oxides, bone, teeth, and composite materials. The MT-7 features high-quality stereozoom optics, multifunction adjustable lighting, a swivelling and tilting stereomicroscope, a digital section counter, and built-in vibration isolation. Research and Manufacturing Co. Circle 480.

Kit to Determine Optimal Buffer

The OptiTaq assists in determining the optimal buffer to use with specific primer-target DNA pairs in a polymerase chain reaction (PCR) experiment. The kit consists of 1 ml of each of ten different buffers with magnesium chloride concentrations varying from 5 to 50 mM. The kit is

Newly offered instrumentation, apparatus, and laboratory materials of interest to researchers in all disciplines in academic, industrial, and government organizations are featured in this space. Emphasis is given to purpose, chief characteristics, and availability of products and materials. Endorsement by *Science* or AAAS is not implied. Additional information may be obtained from the manufacturers or suppliers named by circling the appropriate number on the Readers' Service Card and placing it in a mailbox. Postage is free.

designed to work with *Taq* polymerase from any source. A series of reactions with each of the OptiTaq buffers is set up for each primer-target DNA pair to be used in a PCR experiment. Normal thermocycling conditions are followed to produce PCR products, and a sample from each of the series of reactions is run on an agarose gel. The buffer that yields the greatest amount of specific product is the one best suited for that primer-target DNA pair. BIOS Corp. Circle 495.

Symbolic Computation for the Macintosh

MAPLE 4.2.1: Symbolic Computation for the Macintosh personal computer is a new version of software capable of performing computations including integers, rational numbers, polynomials, tensor manipulation, symbolic and numeric approximation, indefinite integration, statistics, linear algebra, calculus, differential equations, and more. Brooks/Cole Publishing Co. Circle 494.

Manual Slide Stainer

The MicroProbe manual slide stainer brings greater uniformity, reproducibility, and speed to chemical staining, immunohistochemistry, and in situ DNA hybridization. The manual system incorporates the patented capillary-gap technology Fisher first introduced in its Code-On automated system. The system has three integrated components: slide-holder, staining module, and incubator. The slide-holder processes up to 20 specimens at one time. It is designed to eliminate the tedium of individual pipetting and to expose slides to a precise amount of reagent, in the same concentration, for the same duration, at the same temperature, from operator to operator. Fisher Scientific. Circle 488.

Precast Gels for PCR

Novex precast gels for polymerase chain reaction (PCR) analysis offer more convenience, higher resolution, better sensitivity, and more options than standard agarose gels. They can be set up in 30 s with a leak-proof vertical system, with no mixing or melting necessary. The gels can resolve differences that agarose gels cannot. The user can select from three single-percentage gel concentrations, two comb types, and a high-performance 4 to 20% gradient gel. Novex. Circle 492.

Random Primed DNA Labeling Kit

The Random Primed DNA Labeling Kit contains exonuclease-free Klenow fragment. Probes made with exonuclease-free Klenow fragment are two to three times as long as those made with regular Klenow fragment under standard reaction conditions, and the total incorporation of labeled nucleotide is improved by 50%. In addition, biotinylated nucleoside triphosphates are incorporated to a greater extent in the labeling reaction over a longer time period. No change in the overall protocol for random-primed labeling is required for exonuclease-free Klenow fragment. United States Biochemical. Circle 493.

Dissolved Organic Carbon Measurement

Model 555 is a manual-injection analyzer for the determination of dissolved organic carbon in seawater. The instrument permits highly accurate determinations of the oceanic reservoir. The analyzer measures with micromolar sensitivity in the difficult seawater matrix in just 5 min. A 200- μl sample is injected onto a platinum catalyst at 750°C. The sample is quantitatively oxidized, and all carbonaceous material is converted to carbon dioxide. Ionics, Incorporated. Circle 484.

Literature

The 36-page 1990 *Chromatography Autosampler Vial Catalog* features many new sample-handling products including several patented low-volume inserts and supports. Also featured are glass and plastic vials; crimp, plug, and screw-cap closures; and benchtop and manual crimper models. Chromacol. Circle 504.

Chromatography Solutions for Bioscience is a 20-page brochure describing separations of biological molecules performed on Hewlett-Packard's high-performance liquid chromatography systems. The brochure features more than 25 typical application problems facing biochemists today. Hewlett-Packard. Circle 509.

Three new *Technical Briefs* describe scanning electron and transmission electron microscopy techniques, extracellular matrix-coating techniques, and procedures for viewing, counting, and analyzing cells grown on Millicell culture plate inserts. Millipore. Circle 510.

Immunological Reagents for Research is a catalog listing antibodies, conjugates, proteins, and more. Jackson ImmunoResearch Laboratories. Circle 511.

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