PRODUCTS & MATERIALS

Dialysis Tubing

BioDesignDialysis Tubing is available in both nominal 8000 molecular weight and 3500 molecular weight cutoff. The thin, transparent, tear-resistant tubing allows rapid dialysis. It is designed for biological research, and extensive efforts are made to ensure uniform wall thickness, membrane integrity, porosity, and purity. For most applications, it is simply wetted and used. It is available in five diameters ranging from 6.4 mm to 49.5 mm. **BioDesign. Circle 137.**

■

Agarose Comparable to Acrylamide

Agarose SFR (super fine resolution) rivals acrylamide in its ability to resolve DNA fragments less than 1000 bp, without the hazards. DNA bands differing in size by only 2% can be resolved in the range of 1000 to 200 bp. For example, a DNA fragment of 242 bp can be separated from one of 238 bp. By varying the concentration of agarose between 2% and 5%, the user can focus on the separation of DNA fragments of a certain length. **AMRESCO. Circle 138.**

■

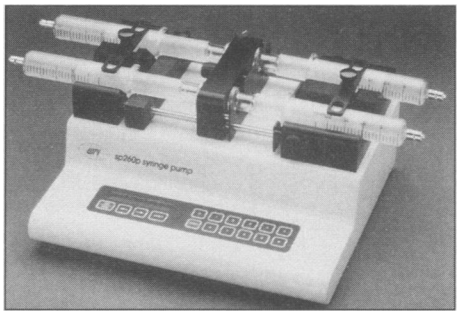
Hybridoma Cell Cultivation

The cultivation of hybridoma cells in the miniPERM bioreactor is a simple and economic method for the production of monoclonal antibodies. Typically, more than 70 mg can be produced in 1 to 4 weeks. Because the expressed antibody is contained in only 35 ml of medium, downstream processing is straightforward. The proSYSTEM medium is specially formulated to complement the bioreactor process. According to the manufacturer, it not only outperforms serum-supplemented medium in terms of antibody production, it requires less than 2% of the serum needed when using standard medium. **Heraeus Instruments. Circle 139.**

■

Microprocessor-Controlled Syringe Pump

The SP260p Push-Pull Pump offers simultaneous infusion and withdrawal with apposing syringes on a single drive. As one set of syringes infuses, the other withdraws at the same rate. The unit can hold up to four syringes, 10 µl to 140 ml each for push-pull, or two syringes for one direction. After the syringe diameter is entered, either directly or



from a table in memory, the pumps' microprocessor automatically performs calibration and control functions. A built-in interface for computer linking or "daisy chaining" allows operation of up to 100 pumps at one time. An optical encoder stall detector prevents pump damage. **World Precision Instruments. Circle 140.**

■

Antibodies

A line of mouse monoclonal antibodies is available paired for immunoassay or enzyme-linked immunosorbent assay (ELISA) development. One antibody is supplied unconjugated, and the other is biotin-labeled for use as detection reagent. The following matched pairs are available: human VCAM (CD106), serum amyloid P, serum amyloid A, P-selectin (CD62P), ICAM (CD54), β_2-microglobulin, interleukin (IL)-8, IL-1β, MCP-1, MCP-3, and epidermal growth factor (EGF). **Antigenix America. Circle 141.**

A range of matched antibody pairs is available for use in developing ELISAs for cytokine quantification. The capture anti-

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.

body is a monoclonal and is used to coat microtiter plates. The detection antibody is a polyclonal that is affinity-purified and conjugated to biotin. This allows the flexibility to use any enzymatic, chemiluminescent, or fluorescent detection system for which avidin conjugates are available. Pairs are available for IL-1β, IL-2, IL-4, IL-6, IL-8, IL-10, IL-11, IL-12, IL-13, IL-15, MIF, MIP-1α, MIP-1β, RANTES, tumor necrosis factor–α, and transforming growth factor–β1. **R&D Systems Europe. Circle 142.**

A goat polyclonal antibody to vesicular acetylcholine transporter has been used for immunohistochemistry on rat and mouse tissue. The antibody labels cholinergic cell bodies in the septum and nucleus basalis as well as cholinergic fibers in the brainstem and spinal cord. Applications include Alzheimer's, neuromuscular, and autonomic nervous system research. **Chemicon International. Circle 143.**

■

Rat EIA Kits

Enzyme immunoassay kits directed against rat antigens are simple to use, specific, and accurate. They offer nanogram and milliliter detection ranges. Kits are available directed against rat interleukin-8, transferrin, ferritin, prolactin, hemoglobin, albumin, α-1-AG and β_2-microglobulin. **Wako BioProducts. Circle 144.**

■

Hybridoma Genotyping Primerset

The Hybridoma Genotyping (H-G) Primerset is a set of oligonucleotide primers for characterizing the genotype of mouse hybridomas. Using the H-G Primerset, the immunoglobulin gene sequence encoding the variable region of the mouse immunoglobulin (Ig) G1, 2a, 2b, 3, and IgM can be amplified by reverse transcriptase polymerase chain reaction and fingerprinted by restriction fragment length polymorphism (RFLP). The IgG RFLP fingerprint is an unequivocal method for identifying hybridoma clones. **LabLogix. Circle 145.**

■

Dual Pure Water System

The Water Prodigy II is a compact system for low-volume applications such as atomic absorption, ion chromatography, fluorescence analysis, and microbiological techniques. It makes use of carbon adsorption, reverse osmosis, deionization, and microfiltration to produce pure water. The unit provides both reverse osmosis–grade Type III and reagent-grade Type I water. As inlet tap water passes through the reverse osmosis membrane, it is stored in a 1.4 liter reservoir. The reverse osmosis–purified water is dispensed from the reservoir through a valve at a rate of 1300 ml/min and the Type I water is dispensed through a gun at a rate of 1100 ml/min. Once the reservoir is depleted, the dispensing rate is 200 ml/min for either. **Labconco. Circle 146.**

■

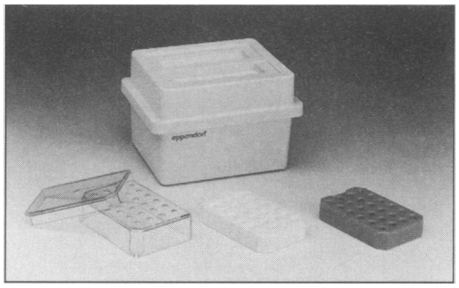
Halogen Moisture Analysis

A new high-speed Moisture Analysis System makes use of an advanced form of halogen drying technology. Major benefits include faster drying times than other moisture analysis systems, reduced risk of sample damage and the resulting repeat analyses, and greater drying control allowing for the use of an expanded range of drying methods. **Mettler-Toledo. Circle 147.**

■

Benchtop Coolers

Eppendorf IsoTherm Benchtop Coolers protect temperature-sensitive 1.5-, 1.7-, 2.0-, or 0.5-ml tube samples. Temperature can be maintained at 0°C for more than 6 hours or at –21°C for more than 3 hours at the laboratory bench without ice. The complete modular system consists of a 24-place transfer/storage rack with matching cold pack, and an insulated storage box with lid. The IsoRack transfer/storage rack is stackable and floats for thawing or incubating of samples. **Brinkmann Instruments. Circle 148.**



■

Literature

CD-CHROM is a comprehensive chromatography database in CD-ROM format. Researchers can access 106,000 chromatography abstracts using DOS, Macintosh, or Windows. **Preston Publications. Circle 149.**

NALGENE Non-Metallic Sanitary Processing Systems describes equipment that provides fluid mixing, storage, and transfer efficiency for the biotechnology, pharmaceutical manufacturing, chemical processing, electronics, food, beverage, and dairy processing industries. **Nalge Nunc International. Circle 150.**

Products & Materials

Science **273** (5282), 1738-1739.
DOI: 10.1126/science.273.5282.1738