

# NEW PRODUCTS



**Sample bath.** Techne's (Princeton, NJ) SB-16/8J shaking bath controls temperature from 22–85°C with a stability of  $\pm 0.05^\circ\text{C}$ ; shaker frequency is variable from 15–200 strokes per minute, with adjustable stroke lengths of 20, 30, or 40 mm. The Tecam TE-8J Tempette immersion circulator is included.

Write in 601 on Reader Service Card



**Pipet plugger.** In Vitro Scientific Products (Oak View, CA) offers the CP-25 cotton plugger for fast, easy to feed, and continuous plugging of various glass pipets. Uniform plug size eliminates fitting problems. The instrument is compact, with a micro-switch activated door and a floor pedal switch.

Write in 602 on Reader Service Card



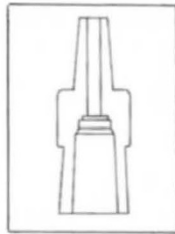
**Calorimeter.** The Omega rapid titration calorimeter from MicroCal (Northampton, MA) allows determination of binding constants and heats in minutes, using a fraction of the valuable materials normally consumed in the process. For use with IBM/PC® compatibles and operable by non-specialists, it calculates more complex calorimetry with available software.

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**Fermentation software.** Bio-Optronics (Rochester, NY) combines data management, real-time control and analysis, and reporting and laboratory notebook features in its new software package for process development with 1–4 fermentors. Data files are transferable to Lotus 1-2-3.

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**Filter.** An ultra-low holdup volume filter, designed for HPLC application by Upchurch Scientific (Oak Harbor, WA), features 2-micron filtration and stainless steel frit. It protects the HPLC instrument, prolongs column life, and minimizes instrument down time. Available in packages of 100.

Write in 606 on Reader Service Card

**Buffer solutions.** Sigma Chemical (St. Louis, MO) offers high-purity buffer solutions that are sterile filtered, and prepared from nuclease-free molecular biology reagents and 18 megohm water. Each lot is tested for suitability in gel electrophoresis or nucleic acid hybridization.

Write in 604 on Reader Service Card

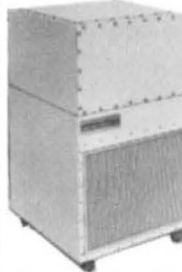


**Competent cells.** Economical, convenient Subcloning Efficiency™ frozen competency cells from Bethesda Research Laboratories (Gaithersburg, MD) permit 25 ng of control plasmid to generate  $> 1 \times 10^4$  ampicillin-resistant colonies in a single 50- $\mu\text{l}$  transformation. DH5 $\alpha$  *recA1* and *endA1* markers ensure stability of inserts and quality of plasmid DNA.

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**Viscosity control.** Now with instant display in automatically selected ranges, Nametre Oscillation Viscometers from Nametre (Metuchen, NJ) provide  $\pm 2\%$  accuracy and repeatability better than  $\pm 0.25\%$ . Viscosity is recordable unattended, as a function of temperature, polymerization, and time through all decades.

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**Room filter.** Baker (Sanford, ME) upgrades cleanliness levels of circulating, incoming, and exhaust air in laboratory or research facilities with the newly available Room Filter Blower Module.

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**DNA purification.** GeneClean™ from Bio 101 (La Jolla, CA) delivers 20-minute DNA purification from agarose gels. Unincorporated label may be removed from nick-translated DNA, and traces of organic solvents from stock solutions. Interchangeable in use with alcohol precipitations, GeneClean kits contain reagents for up to 200 purifications, and detailed instructions.

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**HPLC system.** The Maps integrated HPLC instrument from Bio-Rad (Richmond, CA) allows flow rates to 40 ml/min, permitting up to 2" columns to be used with optimum buffer flow, and providing gram-per-hour separations. Included are UV and conductivity detectors, dual flow paths and injectors, and user-friendly software.

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**Microcentrifuge.** The MTX-150 tabletop refrigerated microcentrifuge from Peninsula Laboratories (Belmont, CA) incorporates a brushless motor that accelerates to 15,000 rpm with one of four rotors in 17 seconds, generating forces to  $19,500 \times g$ .

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**Western blotting.** Sleicher & Schuell's (Keene, NH) Accutran™ Western blot test system includes NC™ Nitrocellulose for transfer and immobilization techniques, a cutter rendering 3, 4, or 5 mm-wide strips from 20  $\times$  25 cm sheets, and an eight- and 25-well incubation tray.

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## A NEW REMOVAL AGENT FOR NUCLEIC ACID AND ENDOTOXIN

A low molecular chitosan derivative which was modified from natural chitin has developed for elimination of nucleic acid and endotoxin effectively.

### CHARACTERISTICS AND APPLICATIONS

- \* High solubility. (20 times more than ordinary chitosan.)
- \* Low intrinsic viscosity. (<0.68 dl/g)
- \* High removal efficiency. (more than 99%)
- \* Suitable for large-scale purification in pharmaceutical production.



### FUNAKOSHI PHARMACEUTICAL CO., LTD.

2-3 Surugadai, Kanda, Chiyoda-ku, Tokyo Japan.  
 Telephone : Tokyo 03-293-2352  
 Telex : J28489 FUNA  
 Telefax : 81-3-295-5545  
 Manufacturer : KURITA WATER INDUSTRIES LTD.

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## PAM Resins now available in 5-gram bottles

Save time and reduce costs by buying larger quantities.

Pam Resins from Applied Biosystems improve peptide synthesis yields and purity over conventional benzyl ester resins.

To order 5-gram bottles or our 0.5 m mol size, call Customer Service at our U.S.A. office, (800) 874-9868, in California (800) 831-3582.



850 Lincoln Centre Drive, Foster City, California 94404

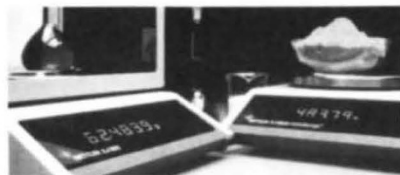
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**Glassware kits.** Microscale kits from Kontes (Vineland, NJ) feature Microflex® connections and PTFE interfaces, assuring secure connections that will not freeze

or loosen. The greaseless glass kits are easily assembled, with unitized designs minimizing travel paths, wetted surfaces, hold up areas, and sample transfers.

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**Balances.** Mettler Instrument (Hightstown, NJ) adds the "J" Series, one analytical and seven precision balances, to its line. For capacities from 310 g–6000 g, the balances fulfill the needs of users who do not require sophisticated applications features, providing readabilities from 0.001–0.1 g.

Write in 615 on Reader Service Card



**Electrophoresis unit.** Isolab's (Akron, OH) Isophore vertical format unit is for all types of electrophoresis procedures, including non-gradient, gradient, and SDS PAGE, IEF and 2-dimensional electrophoresis. Slab gel cassette size for the unit is 82 mm wide × 88 mm long; tube size 7 mm × 70 mm long.

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**Antifoam control.** Excessive foam formation during fermentation processes is inhibited with the VirTis (Gardiner, NY) Antifoam Control Module, for use with VerTi- and Omni-Culture fermentors. The unit's sensing probe monitors addition of antifoam chemical in response to foam presence, with adjustably timed cycles.

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**Syringe filter.** Gelman Sciences (Ann Arbor, MI) introduces Acrodisc 13, a 13 mm syringe filter for sterilizing up to 5 ml of tissue culture media, serum, or enzyme solutions.

It contains a low protein-binding, HT Tuffryn polysulfone membrane, is presterilized and non-pyrogenic, and passes USP Class VI plastics tests. Hold-up volume is less than 28 µl.

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**Bio-cold rooms.** Custom-built Kelvinator (Manitowoc, WI) bio-cold rooms have embossed aluminum walls, ceilings, and floor caps, galvanized steel ceilings and floors with clear spans of up to 20 ft., self-closing doors, camlift hinges, and chrome-plated exterior hardware.

Write in 619 on Reader Service Card



**Microscope objectives.** Nikon's (Garden City, NY) improved CFN series of objectives features extra low dispersion glass, longer working distances, and a higher numerical aperture allowing higher resolution. New coating technology reduces internal lens flare, leading to increased image contrast.

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**Gel apparatus.** Universal Bio-Systems' (West Jordan, UT) pee-wee gel apparatus, for quick analysis of restriction digests, also provides rapid isolation of restriction fragments for cloning. Gels run at 125 V for 30–40 minutes, with a table designed to prevent horizontal drift of the agarose pillow during electrophoresis.

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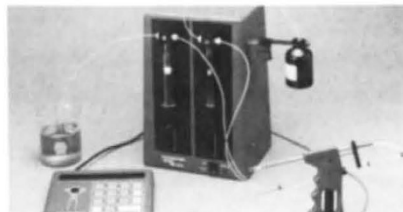
**Recycling system.** R/R Instrument Corp. (Pasadena, MD) introduces an automatic spinning band distillation system for recycling HPLC solvents acetonitrile, methanol, hexane, heptane, THF, ethyl acetate, and others to purities equal to or better than the original.

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## BIO/TECHNOLOGY PRODUCT DATABASE

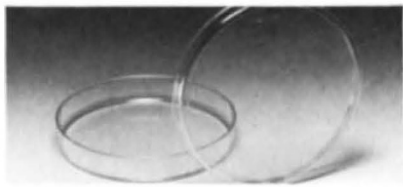
BIO/TECHNOLOGY maintains a file of manufacturers and suppliers for each of the following types of equipment, materials, and services. If you would like to receive free literature on any of the items listed below, simply write in the appropriate number(s) on your reader service card.

- 1015. Alarms
- 1020. Analyzers
- 1030. Animals & animal room equip.
- 1035. Antibodies
- 1040. Assay kits & apparatus
- 1045. Balances
- 1050. Biochemicals, reagents & media
- 1060. Biosafety cabinets & equipment
- 1067. Conferences & seminars
- 1070. Cameras & equipment
- 1075. Cell culture equipment
- 1080. Cell disruptors
- 1085. Cell and tissue lines
- 1090. Cell sorters
- 1100. Centrifuges
- 1110. Chromatography, affinity
- 1120. Chromatography, gas
- 1125. Chromatography, high press. liquid
- 1130. Chromatography, liquid
- 1135. Chromatography, solid
- 1140. Chromatography, TLC
- 1145. Colony counters
- 1150. Colorimeters
- 1155. Computer hardware
- 1160. Computer software
- 1165. Consultants & services
- 1170. Culture apparatus & media
- 1180. Densitometers
- 1190. Dilutors & dispensers
- 1195. DNA sequencers
- 1200. DNA synthesizers
- 1205. Economic, regional development
- 1210. Electrophoresis kits
- 1215. Electrophoresis apparatus
- 1220. Enzymes
- 1225. Evaporators
- 1230. Fermentors & bioreactors
- 1235. Filters
- 1240. Filtration equipment & systems
- 1245. Fraction collectors
- 1250. Freeze driers
- 1255. Freezers & refrigerators
- 1260. Furnaces & ovens
- 1265. Furniture, laboratory
- 1270. Gases
- 1275. Gel media & equipment
- 1285. Homogenizers
- 1290. Image analyzers
- 1295. Incubators
- 1300. Investment
- 1310. Laboratory apparatus, general
- 1315. Laminar flow cabinets
- 1320. Lasers
- 1325. Liquid scintillation counters
- 1335. Mass spectrometers
- 1340. Meters, general
- 1345. Microfiltration equip.
- 1347. Microplate Washer
- 1350. Microscopes, accessories & supplies
- 1355. Microtomes, accessories & supplies
- 1360. pH electrodes & meters
- 1370. Peptide sequencers
- 1372. Peptide synthesizers
- 1373. Pipettes
- 1380. Power Source
- 1374. Production Systems
- 1375. Pumps
- 1385. Radiochemicals
- 1390. Recorders
- 1393. Scanner
- 1395. Shakers
- 1400. Spectrophotometers, UV
- 1410. Sterilizers
- 1415. Tissue culture equip.
- 1420. Titrators
- 1435. Vacuum
- 1425. Valves
- 1430. Water, process & lab.



**Diluters.** The controller software of the Microlab 900 series of diluter/dispensers from Hamilton (Reno, NE) increases programming flexibility by allowing users to choose manual or automatic repeat operation and specify time delays up to 99 seconds. Volume displays help monitor sequence; operable by external computer.

Write in 622 on Reader Service Card



**Petri dish.** The Stakstar™ 100 × 15 16-gram petri dish from Miles Scientific (Naperville, IL) provides secure moving and handling with positive stacking. Packed 500 per case, sterile, in sleeves of 20, the dishes have high optical qualities comparable to Sterlstars®.

Write in 629 on Reader Service Card



**Filters.** Asypor asymmetrical membrane filters from Domnick Hunter Filters (Tracy, CA), for serums and protein solutions, deliver high flow/high throughput.

For applications from pre-filtration to bacterial removal, the pharmaceutical-grade filters are available in pore sizes from 0.1–3.0 microns, and are sterilizable and testable.

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**Ultrapure water.** Barnstead's (Newton, MA) Nanopure II produces ion-free, bacteria-free, Type I water. Cartridges allow production of less than 20 ppb T.O.C. water at the rate of 2 lpm; an HPLC accessory permits daily change of filter element for supercritical applications.

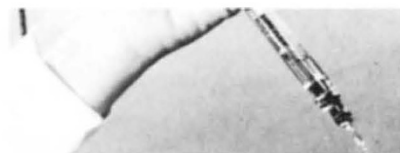
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**Cryogenic vials.** Vanguard (Neptune, NJ) Cryos vials with silicone gasket seating grooves store biological samples in ultra-low mechanical or liquid nitrogen freezers

without implosion, breakage, or leaking. Easy-grip knurls open and close mounted screw caps conveniently.

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**pH electrode.** Ross Sure-Flow™ pH electrodes from Orion Research (Boston, MA) offer ground glass liquid-to-liquid reference junctions providing optimal flow without clogging. Response is fast, with 30-second readings stable to 0.01 pH in temperatures variant by 50°C.

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**Beta counter.** The RMD (Watertown, MA) beta counter measures radiation emitted by a radioisotope-tagged sample while still embedded on a membrane filter, eliminating scintillation vials and fluids, and minimizing radioactive waste.

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**Buffer.** Eastman Kodak (Rochester, NY) introduces Buffereze formula 1, a ready-to-use tris/glycine buffer premix for electroblotting (Western transfer) proteins. Usable with nitrocellulose, nylon, and other hydrophobic membranes, it is packaged in a foil packet, preweighed to produce four litres of pH 8.3 buffer.

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**Concentrator.** Centriprep centrifugal concentrators from Amicon (Danvers, MA) purify and desalt 5–15 ml samples in 10–15 minutes, with recoveries to 95%. Equipped with lowest adsorption YM membranes, they offer a choice of 10,000 or 30,000 MW cutoff.

Write in 632 on Reader Service Card