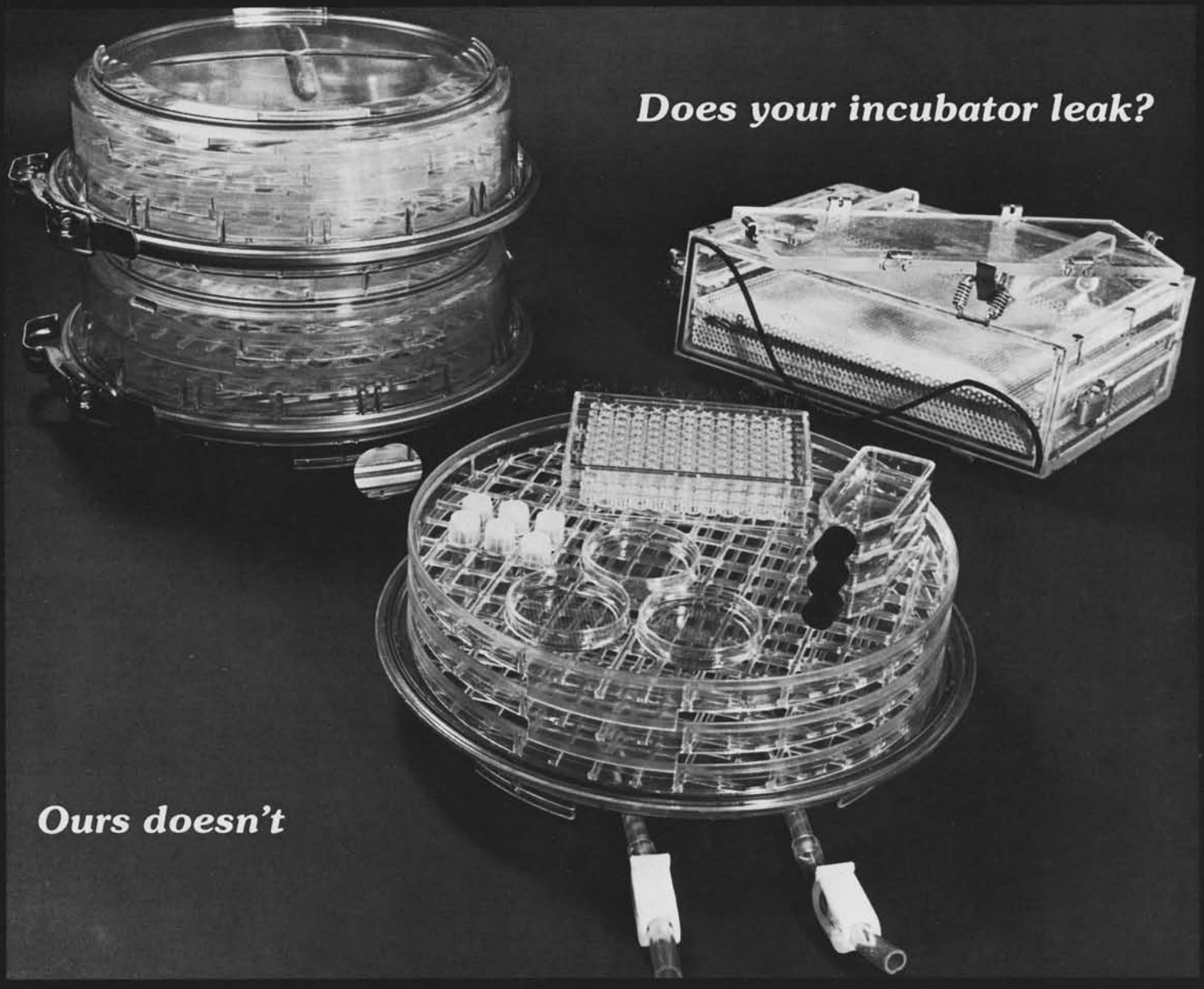
NEW MODULAR INCUBATOR CHAMBER

U.S. PAT. NO. 3886047



A NEW CONCEPT TO MINIMIZE EXPERIMENTAL VARIABILITY

The *Billups-Rothenberg* conceived Modular Incubator Chamber has been developed to meet the critical demands of cellular immunologists who perform Mishell-Dutton primary *in vitro* immune, MLC, CML, mitogen and proliferative responses.

Our reliable air-tight seal is specifically designed to eliminate gas exchange which can cause unpredicted variations in pH and humidity, often found in continuous flow incubators and older rectangular box designs.

- All components can be UV-sterilized.
- Multi-purpose trays conveniently hold petri dishes, test tubes, T.C. flasks, microculture plates, etc.
- Chambers can be stacked and interlocked for agitation or storage.
- Chamber and tray components are high quality, molded polycarbonate.

PRICE $95 ea.
15% discount on orders of 5 or more.

To order or for additional information write or telephone. . .

Billups-Rothenberg Inc.
P.O. Box 977
1320 Ocean
Del Mar, CA 92014
(714) 755-3309

billups-rothenberg inc.

Marine Colloids Announces New Agarose Bead Media For AFFINITY CHROMATOGRAPHY

Flow Rates comparable to glass beads; Performance superior to any other media; Cost competitive with other agarose affinity media at less than 1/20th the cost of glass beads!

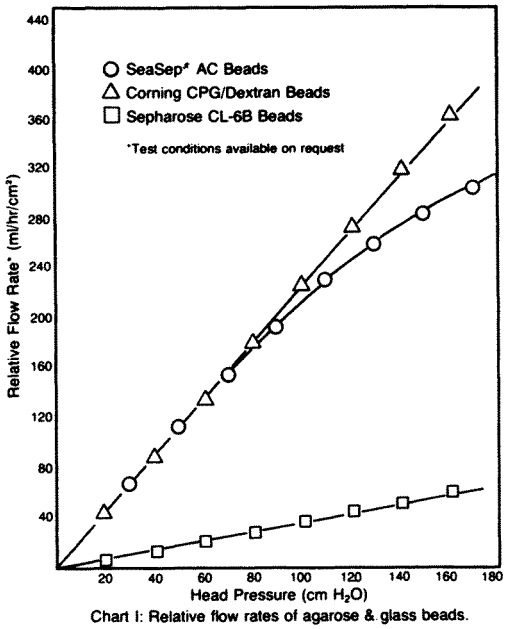
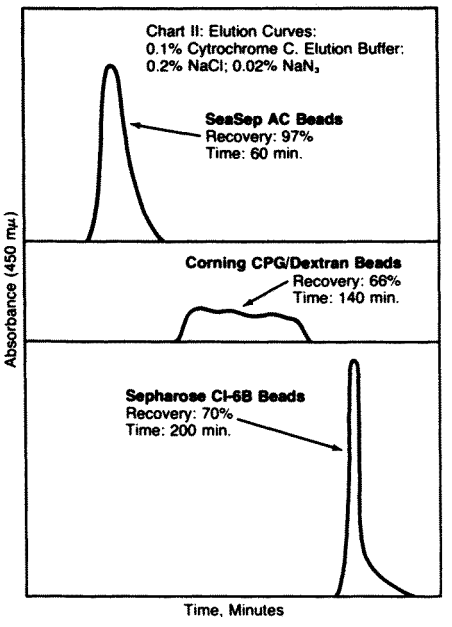


Chart I: Relative flow rates of agarose & glass beads.



Marine Colloids, Inc., the world leader in agarose production announces, with pride, SeaSep® AC Agarose Beads for affinity chromatography.

The new medium offers:

1. High flow rates

SeaSep AC Beads offer flow rates comparable with glass beads and 3-5 times greater than those of other agarose beads. (See Chart #I above.)

2. High coupling capacity

Because of the unique SeaSep AC bead design, these beads exhibit coupling capacities greater than other agarose beads and almost twice that of commercially available derivatized glass beads.

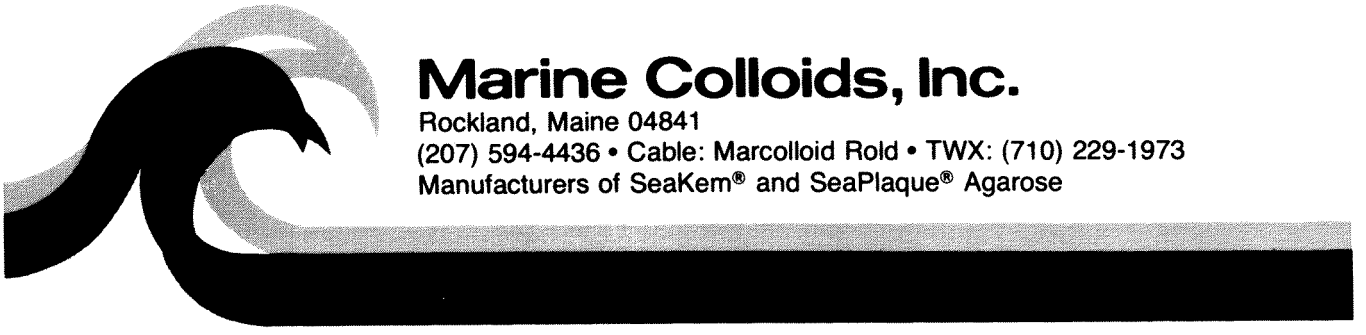
3. Non-specific protein binding

Agarose exhibits substantially less non-specific protein binding than glass. (See Chart #II above.) Only the highest quality SeaKem agarose is used to prepare SeaSep AC bead media.

4. Maximum versatility

Since the SeaSep AC beads are not derivatized, proteins may be coupled directly or separated from the agarose matrix with "Spacer Arms."

Call or write for our complete catalog and price list or a free copy of our agarose monograph.



Marine Colloids, Inc.

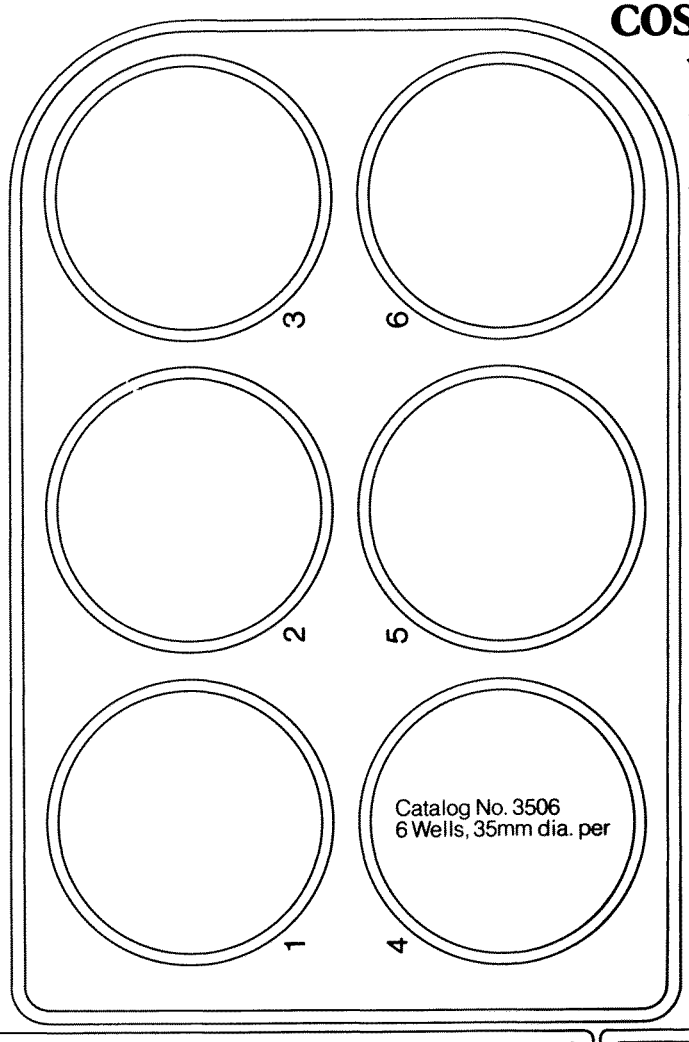
Rockland, Maine 04841

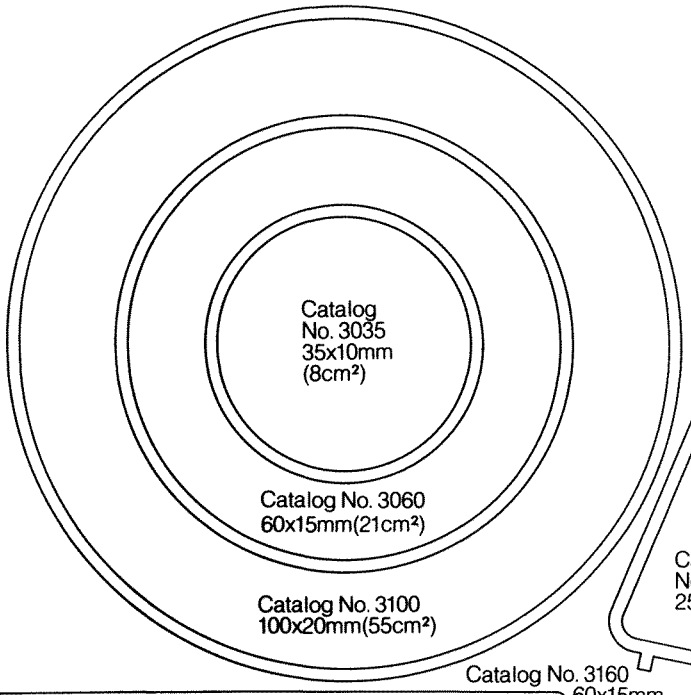
(207) 594-4436 • Cable: Marcolloid Rold • TWX: (710) 229-1973

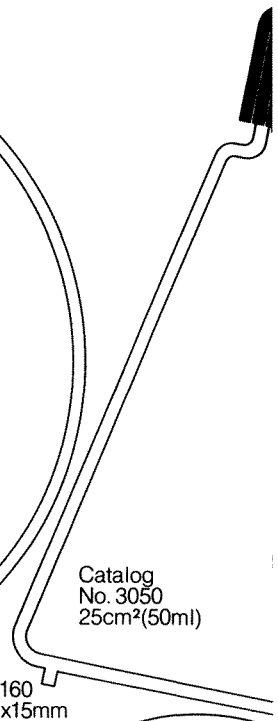
Manufacturers of SeaKem® and SeaPlaque® Agarose

COSTAR DISPOSABLE LABWARE– We started with three dishes and two flasks, and we've been adding labware ever since. Not just new products – new ideas.

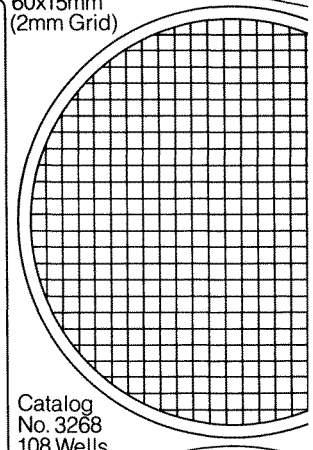
Cluster Plates: Every well numbered so you work quickly and accurately. And rimmed so media stays where it belongs. Plus non-reversible covers with built-in condensation rings to prevent cross-contamination.

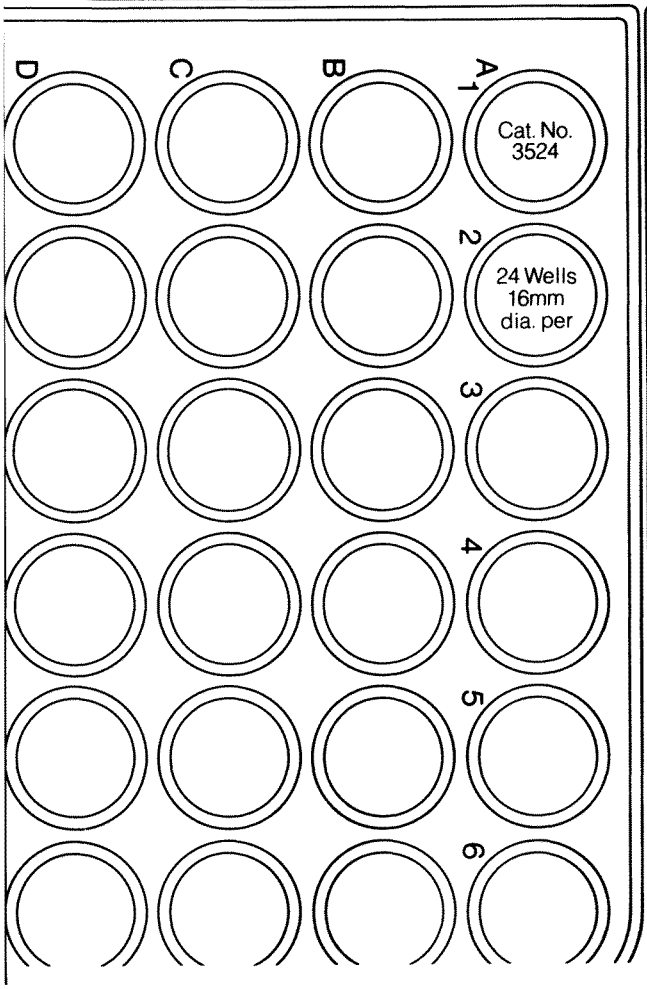


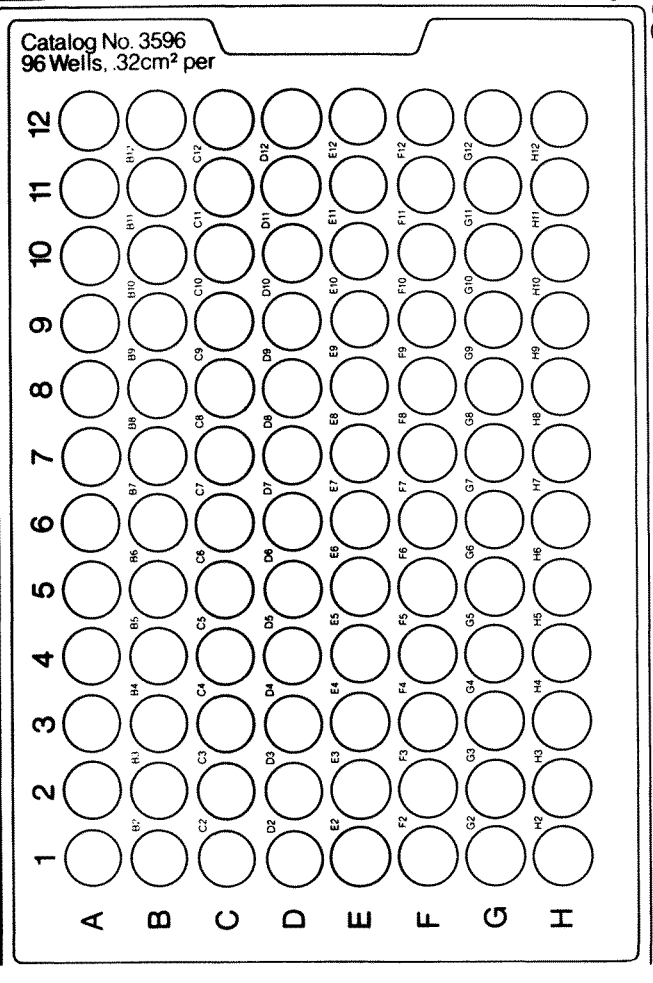




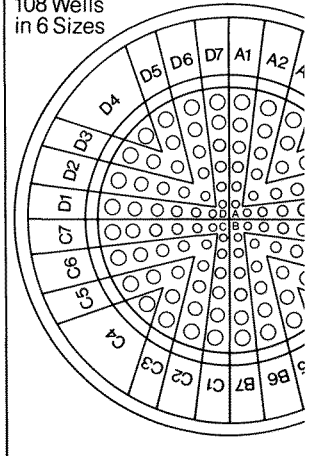
Catalog No. 3160
60x15mm
(2mm Grid)







Catalog
No. 3268
108 Wells
in 6 Sizes

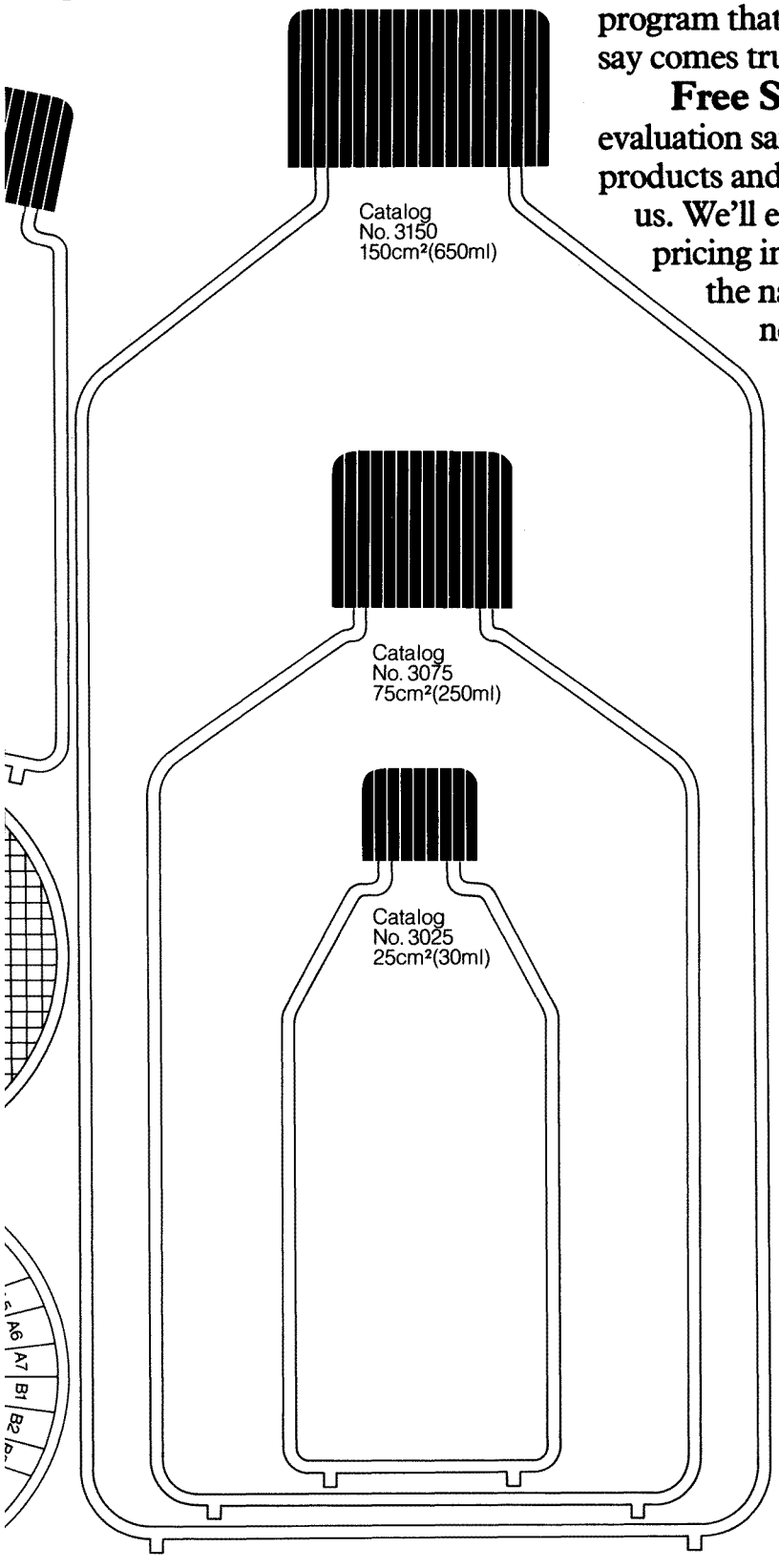


Dishes: Three sizes plus a 2mm grid version and our 108-well Cuprak dish.

Flasks: Deep skirted, easy on/off caps. And graduated media markers for accurate filling without the use of a pipette. We even designed a small, wide-neck triangular flask that lets you reach more growing surface with a 10ml pipette.

On Everything: Frosted labeling surfaces where necessary. Highly polished, distortion-free plastic. Radiation sterilization. And a quality control program that makes sure everything we say comes true.

Free Samples: If you'd like some evaluation samples, pick out two or three products and call or write to us. We'll even include pricing information and the name of our nearest dealer.



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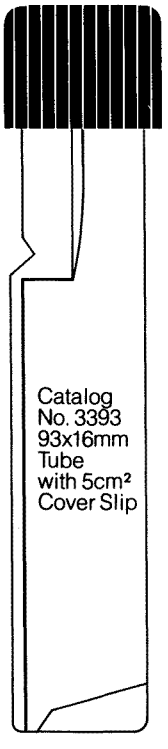
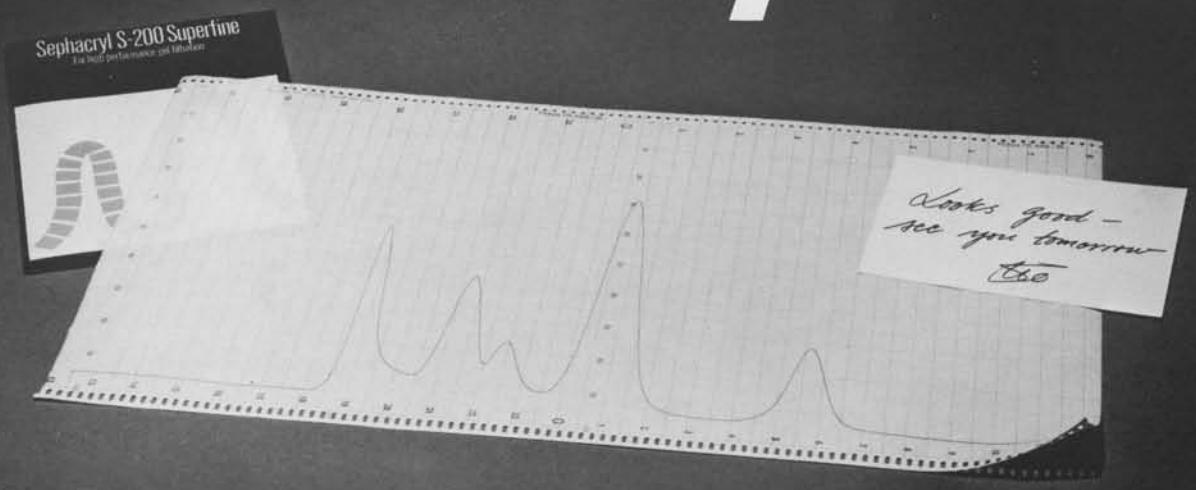


This is the first disposable plastic Leighton Tube. The cover slip has a non-slip handle, and the slide has a scribed center line with each half numbered. Treated cover slip, untreated tube helps prevent unintentional cell attachment.

Tomorrow's results today



Get gel filtration results faster with Sephacryl® S-200 Superfine. It has speed and resolution to spare.

- **Cut separation times. Typical flow rates are 30 cm/hour or better in standard laboratory columns.**
- **Cut column packing times. Sephacryl is pre-swollen ready-to-use in packs of 750 ml and packs fast.**

Sephacryl S-200 Superfine is the new gel filtration medium for proteins, polysaccharides and other biopolymers. It combines excellent chemical and physical rigidity with an exclusion limit of ~250,000 daltons for globular proteins. Sephacryl can be used in detergents, structure-breaking media and organic solvents. It can be autoclaved repeatedly at 120°C.

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One of your faster pickups.

It takes a good schlurper to know one. And while our friend the anteater probably doesn't realize it, he's teamed up with one of the fastest pickups around.

It's the **Titertek Cell Harvester** for mixed lymphocyte cell cultures. *It will harvest 96 samples in less than 5 minutes.* Compare that with several hours or more for manual harvesting.

The Titertek Cell Harvester is a compact, semi-automated unit designed to remove lymphocyte cell cultures from tubes, vials, or multi-well plates by washing and suctioning the cells from the containers, and depositing them on a fiber-glass mat. The area the cells are deposited on is 9mm in diameter and retains particles down to one micron with low background counts. The Cell Harvester can be used with distilled water, saline solution, TCA, methanol, or any other organic solvent.

Unlike our friend, the Titertek Cell Harvester is precision designed to minimize standard error, simple to operate, and requires no housebreaking.

Contact us for product literature and a demonstration — of the **Titertek Cell Harvester** — of course.

If it doesn't say Flow Laboratories, it's not a Cell Raiser product.

Flow Laboratories

1710 Chapman Avenue
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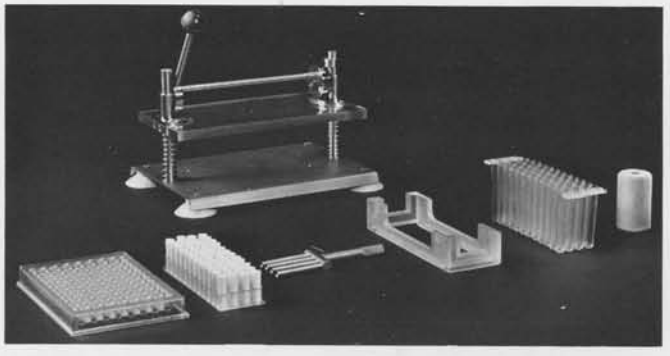
Rockville, Maryland 20852
(301) 881-2900

Inglewood, California

Mississauga, Ontario, Canada

SCHLURP!

SUPER SOPPER



Our friend, the good schlurper, has found another fast pickup to team up with . . . the **Titertek Supernatant Collection System.**

Cellular cytotoxicity assays can be performed quickly, economically, and safely with the Titertek Supernatant Collection System. Designed to facilitate the harvesting of supernatant from a standard Titertek/Linbro 96-well, U-shaped microtitration plate, the Titertek Supernatant Collection System separates the cellular components of a culture from the supernatant. Only the isotope released into the supernatant is collected.

The Titertek Supernatant Collection System is . . .

Quick Harvests 96 wells in less than 30 seconds; eliminates centrifugation of plates;

Accurate Collects approximately 90% of supernatant, uniformly absorbs it, avoids traumatization of cells during collection;

Convenient Does not remove cells during supernatant collection; Eliminates cross-contamination between wells; Prevents buildup of isotopes in equipment

Economical Collects most of the supernatant, permitting the use of fewer target cells and less radioactive label.

The **Titertek Supernatant Collection System,** one more helper from the Cell Raisers.

If it doesn't say Flow Laboratories, it's not a Cell Raiser product.

Flow Laboratories

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SIGMA is pleased to announce several new additions to their expanding list of GLYCOSIDASES.

GLYCOSIDASE specificity for selected terminal carbohydrate residue configurations makes the enzymes useful in removing the terminal monosaccharides from natural and synthetic glycosides. Specific GLYCOSIDASES are especially useful as structural reagents in determining carbohydrate arrangements in glycoproteins, glycolipids, and sphingoglycolipids.

UNIT DEFINITION: One unit will hydrolyze 1.0 μM of the Nitrophenyl Glycoside substrate per minute at the appropriate pH and temperature.

β-N-ACETYLGLUCOSAMINIDASE

A 3015	**From Aspergillus niger** Suspension in 3.5 M $(NH_4)_2SO_4$, 0.05 M Sodium Citrate, pH 5.0 *Activity: 35-50 units per mg* *Protein (W/C), pH 4.0, 25°C.*	2 units 5 units 25 units	$12.00 21.50 75.00
A 2264	**From Jack Beans** Suspension in 2.5 M $(NH_4)_2SO_4$, pH 7.0 *Activity: Approx. 35 units per mg* *Protein (Biuret), pH 4.0, 25°C.*	5 units 10 units 25 units 100 units	$ 8.25 13.75 27.50 75.00

β-N-ACETYGLUCOSAMINIDASE A

A 3391	**From Bovine Epididymis** Suspension in 2.5 M $(NH_4)_2SO_4$, pH 5.5 *Activity: 0.25-1.5 units per mg* *Protein (W/C), pH 4.25, 25° C.*	1 unit 5 units	$15.00 50.00
A 3266	**From Porcine Placenta** Suspension in 2.5 M $(NH_4)_2SO_4$, pH 5.5 *Activity: 5-20 units per mg* *Protein (W/C), pH 4.25, 25° C.*	1 unit 5 units	$ 30.00 100.00

β-N-ACETYGLUCOSAMINIDASE B

A 7640	**From Bovine Epididymis** Suspension in 2.5 M $(NH_4)_2SO_4$, pH 5.5 *Activity: 5-10 units per mg* *Protein (W/C), pH 4.25, 25° C.*	1 unit 5 units 25 units	$ 15.00 50.00 175.00
A 3516	**From Porcine Placenta** Suspension in 2.5 M $(NH_4)_2SO_4$, pH 5.5 *Activity. 0.5-3 units per mg* *Protein (W/C), pH 4.25, 25° C.*	0.5 unit 1 unit 5 units	$ 18.00 30.00 100.00

α-L-FUCOSIDASE

F 7753	**From Bovine Epididymis** Suspension in 2.5 M $(NH_4)_2SO_4$, pH 5.8 *Activity: 2-3 units per mg* *Protein (W/C), pH 6.5, 25° C.*	0.5 unit 2 units	$23.50 63.00

α-GALACTOSIDASE

G 9007	**From Aspergillus niger** Suspension in 3.5 M $(NH_4)_2SO_4$, 50 mM Sodium Acetate, pH 5.5 *Activity: 20-35 units per mg* *Protein (Biuret), pH 4.0, 25° C.*	1 unit 5 units 25 units	$ 5.40 18.00 60.00

β-GALACTOSIDASE

G 9132	**From Aspergillus niger** Suspension in 3.5 M $(NH_4)_2SO_4$, 50 mM Sodium Acetate, pH 5.2 *Activity: 10-15 units per mg* *Protein (Biuret), pH 4.0, 25° C.*	1 unit 5 units 25 units	$ 5.40 18.00 60.00
G 0884	**From Jack Beans** Suspension in 3.0 M $(NH_4)_2SO_4$, 0.025 M Sodium Citrate, pH 5.5 *Activity: 10-25 units per mg* *Protein (Biuret), pH 3.5, 25° C.*	1 unit 5 units 10 units 25 units	$ 26.25 86.50 144.00 288.00

α-MANNOSIDASE

M 7257	**From Jack Beans** Suspension in 3.0 M $(NH_4)_2SO_4$, 0.0001 M Zinc Acetate, pH 7.5 *Activity: 15-25 units per mg* *Protein (Biuret), pH 4.5, 25° C.*	1 mg 5 mg 25 mg	$ 8.50 28.50 138.00

β-XYLOSIDASE

X 5375	**From Aspergillus niger** Suspension in 3.5 M $(NH_4)_2SO_4$, 50 mM Sodium Acetate, pH 5.2 *Activity: 3-6 units per mg* *Protein (Biuret), pH 5.0, 25° C.*	1 unit 5 units	$12.00 40.00

In addition to the above, SIGMA also continues to offer as previously listed in our Catalog:

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Cellulase
Chitinase
β-Galactosidase (E. coli)
β-Galactosidase (Bovine Liver)
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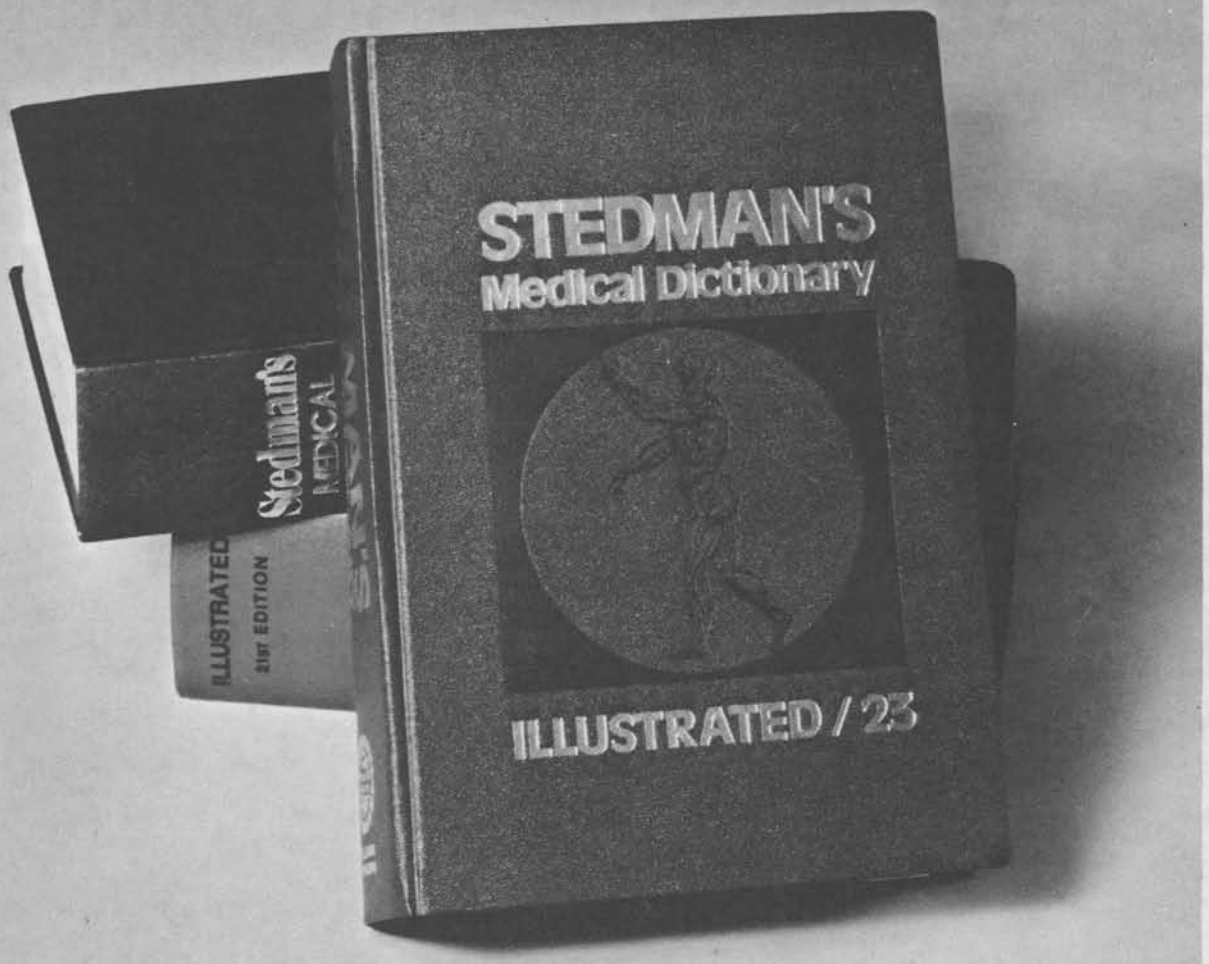

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