

ICN's premixed solutions have been meticulously prepared to the exact formulation required for their intended use. Only the highest quality individual chemicals have been used in these concentrated and ready-to-use preparations.

## Gel Forming Solutions

- Ready-to-use
- Added convenience and safety
- Reproducible results

ICN's ready-to-use solutions are prepared using *Ultra Pure* reagents and deionized water. These solutions eliminate any associated dust hazard. From run to run, gels and pore sizes are consistent and reproducible. Gels are easily prepared at any monomer and cross-linker ratio. No chemical inhibitors are added and they are stable longer than 1 year under proper conditions (cool room temperature).

### LiquaBis™

A 2% (w/v) solution of *Ultra Pure* acrylamide and bis-acrylamide for gel electrophoresis.

800801 500 ml

### LiquAcryl™

A specially prepared 40% (w/v) solution of *Ultra Pure* acrylamide for gel electrophoresis.

800800 500 ml

### LiquiGel™ 19:1

A 40% (w/v) solution of *Ultra Pure* acrylamide and bis-acrylamide at a final ratio of 19:1 specially suited for sequencing gel preparation and nucleic acid separation.

800802 500 ml

### LiquiGel™ 29:1

A 40% (w/v) solution of *Ultra Pure* acrylamide and bis-acrylamide at a final ratio of 29:1 for various applications.

800803 500 ml

### LiquiGel™ 37.5:1

A 40% (w/v) solution of *Ultra Pure* acrylamide and bis-acrylamide at a final ratio of 37.5:1 optimized for preparing gels for protein separation.

800804 500 ml

### Liqui-Gene™ 4%

A liquid acrylamide denaturing gel mix for traditional DNA and RNA isolation containing bis-acrylamide, 1X TBE buffer and 7M urea.

802522 5x100 ml

802523 4x500 ml

### Liqui-Gene™ 6%

A liquid acrylamide denaturing gel mix optimized DNA sequencing gels.

802524 5x100 ml

802525 4x500 ml

### Liqui-Gene™ 8%

An 8% liquid acrylamide denaturing gel mix for traditional DNA and RNA isolation.

802526 5x100 ml

802527 4x500 ml

### Liqui-Pro™ 6%

A 6% liquid acrylamide denaturing gel mix for the discontinuous gel electrophoresis of proteins containing 0.375M Tris (pH 8.8), 0.1% SDS, and *Ultra Pure* acrylamide in filtered, distilled and deionized water.

802528 5x100 ml

802529 4x500 ml

### Liqui-Pro™ 8%

An 8% liquid acrylamide denaturing gel mix for the discontinuous electrophoresis of proteins.

802530 5x100 ml

802531 4x500 ml

### Liqui-Pro™ 10%

A 10% liquid acrylamide denaturing gel mix for the discontinuous electrophoresis of proteins.

802532 5x100 ml

802533 4x500 ml

### Liqui-Pro™ 12%

A 12% liquid acrylamide denaturing gel mix for the discontinuous electrophoresis of proteins.

802534 5x100 ml

802535 4x500 ml

### Liqui-Pro™ 4% Stacking Gel

An acrylamide 4% stacking gel for use with Liqui-Pro™ acrylamide mix or with "hand-made" laboratory gels. Prepared with 0.125M Tris at pH 6.8.

821675 100 ml

821676 500 ml

### PAGE DNA Sequencing Solution 6%

A 19:1 acrylamide/bis-acrylamide solution in TBE with 7M urea. Simply add TEMED and fresh ammonium persulfate and mix. Contains no detectable DNase, RNase or protease.

194015 100 ml

5x100 ml

### PAGE DNA Sequencing Solution 8%

A 19:1 acrylamide/bis-acrylamide solution in TBE with 7M urea. Simply add TEMED and fresh ammonium persulfate and mix. Contains no detectable DNase, RNase or protease.

194016 100 ml

5x100 ml



Solutions



# Solutions

## DNA, RNA and Protein Purification

### Phenol and Phenol:Chloroform Solutions

Eliminate the risk of potential hazard from handling phenol and chloroform by switching to ICN's ready-to-use saturated solutions. ICN's prepared solutions reduce waste and the added expense associated with ordering multiple reagents. There are five different solutions to choose from depending on your needs.



#### Phenol Saturated Solution, pH 6.6

Prepared from *Ultra Pure* phenol for both DNA and RNA extraction. Alkaline buffer is included for DNA applications requiring higher pH values up to 7.9.

802518	100 ml
802519	400 ml

#### Phenol Saturated Solution, pH 4.5

Prepared from *Ultra Pure* phenol for denaturing DNA and purifying RNA, as well as, purifying RNA from genomic DNA.

802516	100 ml
802517	400 ml

#### Phenol:Chloroform Saturated Solution, pH 5.2

Ready-to-use 1:1 solution for RNA purifications.

802514	100 ml
802515	400 ml

#### Phenol:Chloroform Saturated Solution, pH 6.7

Ready-to-use 1:1 solution for the extraction and purification of DNA. Alkaline buffer is included to adjust the pH up to 8.0.

802520	100 ml
802521	400 ml

#### Phenol:Chloroform Saturated Solution, pH 4.7

Ready-to-use 5:1 solution for the purification of RNA from mixtures containing DNA, RNA and proteins.

802512	100 ml
802513	400 ml

### Cesium Trifluoroacetate Solution

A special preparation serving as a centrifugation medium for nucleic acid isolation and purification. TFA ions promote hydration and solubilization of nucleic acids and proteins improving migration and resulting in clearer bands. Purity: 99%.

882485	25 ml
882486	100 ml

### Chloroform

Ideal for PCR aqueous phase recovery overlaid with mineral oil. Each vial contains 1.5 ml.

194800	1 vial
	5 vials

### DNazol™ Reagent

- Works on tissues, cells or blood.
- Entire process requires only 30 minutes with 70-100% recovery.
- No handling of phenol needed.
- Complete, ready-to-use genomic DNA isolation solution.

This novel guanidine detergent lysing solution selectively precipitates genomic DNA from cell lysates, tissues and liquids. The resulting genomic DNA can be used for restriction endonuclease digestion, southern blotting, molecular cloning and PCR amplification. Only 1 ml isolates DNA from 25-50 mg tissue, 0.1 ml blood or 1-3x10<sup>7</sup> cells. Detailed protocols are included. Store at 4°C.

821825	50 ml
821826	100 ml

### NEW!

#### Trichloroacetic Acid Solutions

ICN's premixed solutions for protein precipitation save time, money and energy.

Cat. No.	Concentration	Quantity
196057	6.1 N, Approx. 100% (w/v)	100 ml
196058	0.73 N, Approx. 12% (w/v)	100 ml
196059	0.60 N, Approx. 10% (w/v)	25 ml
196060	0.49 N, Approx. 8% (w/v)	50 ml 200 ml
196061	0.38 N, Approx. 6.25% (w/v)	50 ml 200 ml
196062	0.18 N, Approx. 3% (w/v)	50 ml 500 ml

## Iso-Lytes™ - Ampholytes for IEF

ICN's Iso-Lytes are supplied as 40% (w/v) concentrates and produced in the pH ranges specified, not pre-blended. Typically, a final concentration of 2-4% is utilized for gels. The pH ranges may be blended to create different gradients. However, where the range overlaps neutrality (pH 7.0), they may be used unblended. We recommend Iso-Lyte™ 3-10 be added to any pH range which does not already include pH 7.0 because a water zone will form if no pH 7.0 ampholytes are present. Since water serves as an ampholyte (pH 7.0), it will weakly conduct. Coupled with its high resistance, water will decrease the voltage in other areas of the gel, thereby reducing the efficiency of the protein separation. Use of Iso-Lyte™ 3-10 to form 20% of the total concentration will effectively prevent formation of the water zone.



Cat. No.	pH Range	Quantity
800690	3-10	10 ml
801690		25 ml
800691	3-7	10 ml
801691		25 ml
800692	4-8	10 ml
801692		25 ml
800693	4-9	10 ml
801693		25 ml
800694	6-10	10 ml
801694		25 ml
800695	3-5	10 ml
801695		25 ml
800697	5-8	10 ml
801697		25 ml
800700	8-10	10 ml
801700		25 ml

## Buffers

ICN's premixed buffer solutions are prepared from the highest quality reagents and filtered, deionized water. They are specifically suited for immunology, cell culture, molecular biology and electrophoresis procedures.

### HEPES

A 1M solution suitable for cell culture, molecular biology and various other applications.

1688446	20 ml
1688449	100 ml

### HEPES Saline Albumin Gelatin Buffer

A sterile preparation for Rubella HA test and in vitro diagnostic use.

2801749	100 ml
2801754	500 ml

### Hydrochloric Acid

A 1 N solution suitable for cell culture and various other applications.

1688045	10 ml
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### Sodium Bicarbonate 5.6%

A 5.6% (w/v) solution ideally suited for cell culture and molecular biology applications.

1688249	100 ml
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## Sodium Bicarbonate 7.5%

A 7.5% (w/v) solution ideally suited for cell culture and molecular biology applications.

1688346	20 ml
1688349	100 ml

## Sodium Hydroxide

A 1 N solution for adjusting the pH after buffer addition.

1688145	10 ml
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## TBE 10X Concentrate

(Tris-Borate-EDTA 10X Concentrate)

Prepared from ICN's *Ultra Pure* reagents, this concentrate is used to make a 1X solution for polyacrylamide and agarose gel electrophoresis. When diluted, it yields a TBE buffer solution containing 100 mM Tris, 90 mM boric acid and 1 mM EDTA. No detectable contaminating activity has been found in DNA nicking, ribonuclease or protease assays.

816721	1 liter
816724	5 liters

## TBE Gel Running Buffer System

This kit contains 2x500 ml 5X TBE running buffer, 25 ml of 2X TBE sample solubilization buffer.

821581	1 kit
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## TBE Sample Solubilization Buffer

A specially prepared solution for dissolving samples prior to electrophoresis. Samples should be mixed in a 1:1 ratio with this sample solubilization buffer which consists of Tris 0.18M, boric acid 0.16M, EDTA 0.0052M, sodium azide 0.01%, sucrose 10%, and bromophenol blue 0.02% tritrated to pH 8.0 with HCl.

821697	25 ml
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## Tris-Glycine-SDS Gel Running Buffer System

This kit contains 500 ml of 10X concentrated Tris-Glycine-SDS running buffer, 25 ml 2X Tris-Glycine-SDS sample solubilization buffer and 25 ml 2X Tris-Glycine-SDS sample solubilization buffer with 2-mercaptoethanol.

821580	1 kit
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## Tris-SDS Sample Solubilization Buffer

A specially prepared solution for dissolving samples prior to electrophoresis with 2-mercaptoethanol. Samples should be mixed in a 1:1 ratio with this sample solubilization buffer which consists of Tris 0.125M, SDS 2%, sucrose 10%, bromophenol blue 0.02%, and 2-mercaptoethanol 5% tritrated to pH 8.0 with HCl.

821695	25 ml
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## Tris-SDS Sample Solubilization Buffer

A specially prepared solution for dissolving samples prior to electrophoresis without 2-mercaptoethanol. Samples should be mixed in a 1:1 ratio with this sample solubilization buffer which consists of Tris 0.125M, SDS 2%, sucrose 10%, and bromophenol blue 0.02% tritrated to pH 8.0 with HCl.

821696	25 ml
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## Tris-Tricine Running Buffer System

This kit contains a 10X concentrated running buffer for use with ICN's CAP™-Gel Plus Tris-Tricine precast gels. The anode buffer consists of 200 mM Tris HCl, pH 8.9. The cathode buffer consists of 100 mM Tris, 10 mM Tricine, 0.1% SDS, pH 8.25.

821803	1 kit
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## Diluents

ICN's diluents and waters are meticulously prepared to meet the criteria specified and can be used for various applications.

### Antibody Diluent

A ready-to-use normal diluent for both primary and secondary antibodies. Storage will last up to 18 months with this diluent at 4-8°C.

980641	125 ml
980642	500 ml
980643	1 liter

### Enzyme Label Diluent

A ready-to-use diluent specifically for enzyme labeled antibodies and streptavidin/avidin enzyme conjugates. Storage will last up to 18 months with this diluent at 4-8°C.

980651	125 ml
980652	500 ml
980653	1 liter

### Gold Label Diluent

A ready-to-use diluent specifically for gold labeled antibody conjugates formulated to maximize stability and minimize background. Storage will last up to 18 months with this diluent at 4-8°C.

980661	125 ml
980662	500 ml

### Water, DNase, RNase-Free

Deionized water treated with 0.001% DEPC, filtered through a 0.2 micron filter and autoclaved yielding a sterile solution completely void of detectable DNase (both exo and endo) and RNase.

821739	500 ml
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### Water, 18 Megohm

Sterile filtered and specially prepared for polymerase chain reaction (PCR) applications. No detectable DNase or RNase. Each vial contains 1.5 ml.

195720	1 vial
	5 vials

### Water, Double Deionized

Sterile, double deionized (by reverse osmosis) water ideally suited for cell culture applications.

1696054	500 ml
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### Water, LAL Reagent

Specially prepared for use in Limulus Amebocyte Lysate assays and most cell culture applications. Contains <0.005 Endotoxin per ml.

3075049	100 ml
3075054	500 ml



## Stains

Prepared from highly purified chemicals, these solutions offer added convenience and safety for various applications including staining of electrophoresis gels and microscopy procedures.



### Coomassie Colloidal Image Enhancer

A colloidal suspension of Coomassie Brilliant Blue G which is as sensitive as most silver stains. It dramatically enhances proteins, peptides and DNA fragments by staining them in a rich dark blue.

821582 500 ml

### Eosin Y

A 10% solution of eosin Y disodium salt for various staining protocols.

195700 100 ml  
500 ml  
1 liter

### Ethidium Bromide

A 10 mg/ml preparation of ethidium bromide in filtered, deionized water that is excellent for electrophoresis. There is no associated dust hazard, and it eliminates the time spent weighing and mixing.

802511 10 ml

### Neutral Red

A 1:300 solution for cell and molecular biology applications.

1691149 100 ml

### Phenol Red

A 0.5% (w/v) solution for various cell and molecular biology procedures.

1690049 100 ml

### Trypan Blue

A 0.4% (w/v) solution prepared with normal saline. Store at 15-30°C.

1691049 100 ml

## Chromogenic Substrates

- Low background
- Stable at room temperature
- Eliminates exposure to potentially toxic powders
- Greater sensitivity

ICN offers a comprehensive line of safe, stable, ready-to-use and concentrated chromogenic substrates for immunoblotting, ELISA, immunohistology, and molecular biology techniques. These stable liquid substrates are prepared from the highest quality reagents and they are quality assured. They are stable at room temperature except in those instances where specified.

### ABTS®

(2,2'-Azino-bis(3-ethylbenzthiazoline-6-sulfonic acid))

A soluble, safe, convenient and sensitive peroxidase substrate for ELISA. The resulting intense blue-green color is measurable between 405 and 410 nm. It may be used for both kinetic and endpoint reactions. Prepared at 1.46 mmol/liter.

821809 100 ml  
821810 1 liter

### ABTS®

(2,2'-Azino-bis(3-ethylbenzthiazoline-6-sulfonic acid))

A peroxidase substrate for sensitive enzyme immunoassays.

195852 100 ml

### AEC 50X Concentrate

(3-Amino-9-ethylcarbazole)

A 0.095M precipitating peroxidase substrate that produces a red end product soluble in alcohol. Aqueous mounting media and counterstains must be used in immunohistology procedures.

821811 10 ml  
821812 100 ml

### AEC 10X Buffer Concentrate

Dilutes to working solution with a pH of 5.0 to be used with AEC 50X concentrate.

821813 50 ml  
821814 500 ml

### AMP 10X Buffer Concentrate

(2-Amino-2-methyl-1,3-propanediol)

Used to buffer p-NPP liquid concentrate for phosphatase assays. Storage 2-8°C.

980841 500 ml  
980842 5 liters





# Solutions

## BCIP

(5-Bromo-4-chloro-3-indolyl phosphate)

A phosphatase substrate which forms an insoluble indigo color. Stable at 2-8°C.

980781	100 ml
980782	500 ml

## BCIP-INT

(5-Bromo-4-chloro-3-indolyl phosphate/p-Iodonitrotetrazolium)

Similar to BCIP-NBT but produces an intense orange color.

821819	100 ml
821820	500 ml

## BCIP-NBT Plus

(5-Bromo-4-chloro-3-indolyl phosphate/Nitroblue tetrazolium)

A phosphatase substrate which offers more sensitivity than all other products with little or no background. The BCIP hydrolysis reaction along with the NBT reduction produces a deep purple color.

980771	100 ml
980772	500 ml

## BCIP-NBT

(5-Bromo-4-chloro-3-indolyl phosphate/Nitroblue tetrazolium)

Similar to BCIP-NBT Plus but formulated specifically for immunoblotting procedures.

980871	100 ml
980872	500 ml

## BCIP-NBT

(5-Bromo-4-chloro-3-indolyl phosphate/Nitroblue tetrazolium)

A phosphatase substrate producing a deep purple color enhancing ELISA and immunohistology procedures.

980621	100 ml
980622	250 ml

## BCIP-TNBT

(5-Bromo-4-chloro-3-indolyl phosphate/Tetranitroblue tetrazolium)

Similar to BCIP-NBT Plus but is more sensitive and forms a more intense purple color. Ideal for double antibody staining with BCIP-NBT.

821821	100 ml
821822	500 ml

## 4-Chloro-1-Naphthol

A ready-to-use peroxidase substrate.

980611	50 ml
980612	100 ml

## 4-Chloro-1-Naphthol

A ready-to-use peroxidase substrate. Stable up to 15 months.

152347	50 ml
	100 ml

## Chlorpromazine HCl

A 25 mg/ml sterile solution which serves as a substitute for benzidine, o-dianisidine and o-toluidine.

151454	10 ml
	5x10 ml
	25x10 ml

## Cobalt Sulfate

A 2% (w/v) solution for intensifying DAB on tissue sections and blots.

980741	100 ml
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## Copper Chloride

A 1% (w/v) solution for intensifying DAB on tissue sections and blots.

980751	100 ml
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## DAB

(3,3'-Diaminobenzidine)

Peroxidase substrate for immunohistochemical and immunoblotting procedures.

980571	300 ml
980572	800 ml

## DAB 50X Concentrate

(3,3'-Diaminobenzidine)

A peroxidase substrate which produces a brown end product insoluble in alcohol. Store 2-8°C.

821815	10 ml
821816	100 ml

## DAB 10X Buffer Concentrate

Dilutes to a working solution with pH 7.6 to be used with DAB 50X concentrate. Store 2-8°C.

821817	50 ml
821818	500 ml

## DEA Buffer

(Diethanolamine)

A working solution for use with p-NPP liquid concentrate for phosphatase ELISAs.

980831	500 ml
980832	5 liters

## MUP

(4-Methylumbelliferyl phosphate)

A ready-to-use sensitive fluorogenic phosphatase substrate demonstrating an excitation wavelength of 360 nm and an emission maximum at 450 nm.

821823	100 ml
821824	500 ml

## Naphthol AS-Phosphate/Fast Red Violet LB

A phosphatase stain system similar to Naphthol AS-Phosphate/New Fuchsin that cannot be used for permanent records. Storage 2-8°C.

980861	250 ml
980862	1 liter

## Naphthol AS-Phosphate/New Fuchsin

A phosphatase stain system that produces an alcohol insoluble red dye consisting of buffered naphthol AS-phosphate concentrate, new fuchsin and sodium nitrite. Storage 2-8°C.

980851	250 ml
980852	1 liter

## NBT

(p-Nitroblue tetrazolium)

This ready-to-use buffered solution is beneficial in analyte detection systems employing dehydrogenase enzyme chemistry. Storage 2-8°C.

980791	100 ml
980792	500 ml

## Nickel Sulfate

A 2% (w/v) solution which intensifies DAB on tissue sections and blots.

980731	100 ml
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## p-NPP 50X Concentrate

(p-Nitrophenyl phosphate)

An excellent substrate for phosphatase based ELISAs. The yellow soluble end product is measurable between 405-410 nm. It may be used in both kinetic and end point reactions. Storage 2-8°C.

980821	10 ml
980822	100 ml

## p-NPP

(p-Nitrophenyl phosphate)

An excellent ready-to-use substrate for phosphatase based ELISAs. The yellow soluble end product is measurable between 405-410 nm. It may be used in both kinetic and end point reactions. Buffered with DEA. Storage 2-8°C.

980811	100 ml
980812	500 ml

## PMP

(Phenolphthalein monophosphate)

After reaction with phosphatase and stopping the reaction with 1 M NaOH, a brilliant red color forms with an absorption maximum at 552 nm. Quantitative measurements are made with 540 nm or 570 nm filters with minimal sensitivity loss. Storage 2-8°C.

980801	100 ml
980802	500 ml

## Silver Methenamine

A 4% (w/v) solution that intensifies DAB on tissue sections and blots. Storage 2-8°C.

980761	100 ml
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## TMB

(3,3',5,5'-Tetramethylbenzidine)

A ready-to-use peroxidase substrate for ultrasensitive ELISA procedures.

980601	50 ml
980602	100 ml

## TMB

(3,3',5,5'-Tetramethylbenzidine)

A ready-to-use peroxidase substrate prepared specifically for manual assays.

196025	100 ml
	1 liter

## TMB

(3,3',5,5'-Tetramethylbenzidine)

This substrate produces an insoluble aquamarine blue precipitate with little or no background. It is specifically prepared for immunoblotting procedures.

821807	100 ml
821808	1 liter

## Separation Media

### LSM<sup>®</sup> - Lymphocyte Separation Medium

- High yields
- Easy-to-use
- Greater than 96% viability

LSM<sup>®</sup> isolates viable mononuclear cells from defibrinated or heparinized peripheral human blood in three simple steps:

- Step 1 - Add 3 ml of LSM<sup>®</sup> to a 15 ml centrifuge tube.
- Step 2 - Dilute 2 ml of whole blood with 2 ml of physiological saline.
- Step 3 - After centrifuging for 15-30 minutes at 400 g, draw off the top layer of plasma followed by the mononuclear cell layer.



### LSM<sup>®</sup>

A sterile filtered solution of sucrose polymers and sodium diatrizoate at a density of 1.077-1.080 g/ml at 20°C. Each lot is tested to assure sterility and a minimum of 96% viability of isolated peripheral blood lymphocytes.

50494	5x100 ml
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### Erythro-Lyse<sup>™</sup>

Erythro-Lyse<sup>™</sup> gently lyses erythrocytes from whole blood at physiological pH while maintaining intact populations of leukocytes, monocytes and granulocytes permitting easy separation via their light scattering characteristics. Unfixed cells remain viable which may then be used in cell culture if both the lyse buffer and wash buffer are sterile filtered. Erythro-Lyse<sup>™</sup> may be used with secondary antibodies and reagents.

823211	250 preps
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### Leukocyte Iso-Gel

A specially processed, gelatin-based, sterile leukocyte separation medium which separates leukocytes via sedimentation rate differential. A 4:1 ratio of whole blood to Leukocyte Iso-Gel forms layers for isolation within 1 hour at 20-37°C.

153895	500 ml
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# Solutions

## MonoPoly™ Resolving Medium

- Separates mononuclear and polymorphonuclear leucocytes in two distinct bands.
- Results in greater than 95% cell viability.
- Simple to follow procedure.
- Requires no sample dilution or lysis of erythrocytes.
- Excellent for histocompatibility testing, lymphokine studies, in vitro immunity assays and all other white blood cell preparation procedures.

ICN's sterile preparation separates both mononuclear and polymorphonuclear leukocytes from whole blood in a simple step procedure. The use of MonoPoly™ ensures excellent separation and high viability of isolated cells on fresh human blood (within 2 hours of collection). Typically, leukocytes are from 95-98% viable. Additionally, good separation can be obtained for samples up to 3 hours after blood collection.

## MonoPoly™

This ready-to-use solution of Ficoll-hypaque has a final density of 1.114 g/ml.

1698049 100 ml

## Cell Culture Products

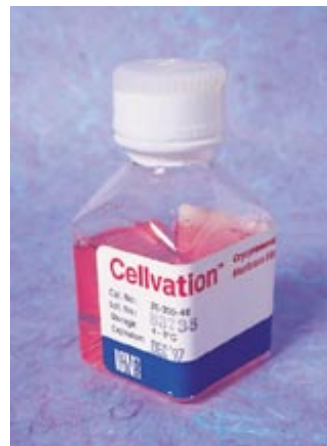
### Cellvation™

- Ready-to-use universal cryopreservation medium.
- Contains no DMSO or serum.
- No serum presence during freeze/thaw cycles for serum-free adapted cells.
- Maximum recovery and faster cell attachment.
- No cytotoxic risks.
- Equally effective on serum-free and serum-dependent cell lines.

ICN's Cellvation™ is a convenient, specially formulated ready-to-use preparation for cells adapted to serum-free conditions. However, it performs equally on serum-dependent cell cultures and, in most, instances better than other commercially available products containing serum and DMSO. Since Cellvation™ does not contain DMSO, there are no cytotoxic risks to the cells. It offers faster cell attachment for anchorage-dependent cell lines after thawing. Furthermore, no serum is needed at any stage providing 100% truly defined cell culture.

### Cellvation™

20300M2 60 ml



Solutions

## LymphoSep™ - Lymphocyte Separation Medium

*When the resolving power of MonoPoly™ is not required, switch to LymphoSep™ for your routine separations!*

- Ficoll-based separation reagent.
- Isolates lymphocytes from defibrinated and heparin treated blood.
- Certified for in vitro diagnostic use.
- Room temperature storage

LymphoSep™ rapidly and reliably isolates mononuclear lymphocytes from whole blood. This sterile, iso-osmotic, low viscosity solution results in clear separation of viable cells from heparinized or defibrinated blood by one-step density centrifugation. Lymphocytes can be easily isolated by layering diluted, heparinized blood over a solution of sodium metrizoate that contains a polysaccharide. The polysaccharide aggregates the erythrocytes for sedimentation by low centrifugation. The less dense lymphocytes remain as a clearly defined band at the plasma-LymphoSep™ interface.

## LymphoSep™

This ready-to-use sterile aqueous solution of sodium metrizoate and Ficoll has a final density of 1.077 g/ml.

1692249 100 ml  
1692254 500 ml



## Opti-Freeze™

- Ready-to-use cryopreservation medium.
- Proven results everytime.
- Saves time, energy and expense.
- Maximum recovery with minimal cell damage.

This fully formulated, quality assured universal DMSO cryopreservation medium is thoroughly tested for sterility, endotoxin and preserving efficiency. The use of Opti-Freeze™ minimizes the damage to cells acquired during freezing and increases the recovery rate of preserved cells. Opti-Freeze™ may be frozen and thawed a minimum of five times without appreciable loss of activity or performance. However, it is recommended that the product be aliquoted into single use volumes if more than five cycles are necessary. It is stable for 3 years at -20°C.

## Opti-Freeze™

This ready-to-use solution consists of 10% DMSO, 10% FBS (heat-inactivated) and 80% Iscove's Modified Dulbecco's medium with HEPES.

2030148 50 ml



## Opti-Clone™

- Promotes hybridoma growth.
- Eliminates the need for feeder layers.
- Increases antibody production.
- Improves the viability of stressed cells.
- Improves the recovery of surviving hybridomas during HAT selection.

Opti-Clone™, a partially purified hybridoma growth medium supplement, improves the cloning efficiency of murine B-cell hybridomas. It enhances the growth of hybridomas cultured at low cell densities, and it dramatically increases the total number of antibody producing colonies.

## Opti-Clone™

It is supplied as a sterile concentrate devoid of endotoxin and contaminating murine antibodies.

1000045 10 ml  
1000048 50 ml

## B/T-Cell Plus™

- Convenient, ready-to-use supplement.
- Stimulates the growth of both B and T-cells in vitro.
- Promotes and maintains helper T-cells.
- Promotes the growth of IL-2 and IL-4 dependent cell types.
- Provides greater levels of IL-2 than rat or mouse spleen feeder cells.

ICN's B/T-Cell Plus™ growth supplement is prepared from a stimulated mouse lymphoma cell line and is functionally tested for IL-2, IL-4 and IL-6. The cell line used in the production of B/T-Cell Plus™ has been reported to produce various other growth factors including IL-3, IL-5 and GM-CSF.

## B/T-Cell Plus™

A convenient, ready-to-use supplement which improves productivity.

1000245 10 ml  
1000248 50 ml

## Opti-Cell™

- Provides optimal hematopoietic cell growth.
- Enhances leukemic cell growth.
- Improves bone marrow cytogenetic analysis.
- Excellent source of colony stimulating factor activity.
- Convenient, ready-to-use preparation.

Opti-Cell™ is a sterile, ready-to-use conditioned medium prepared from a cultured Giant Cell tumor line. It contains a variety of growth factors such as IL-1 and IL-6. Additionally, Opti-Cell™ contains factors such as plasminogen activator, collagenase and prostaglandin E allowing optimal growth and productivity of various progenitor cells. Opti-Cell™ is screened for HBsAg, HIV and mycoplasma.

## Opti-Cell™

A sterile, ready-to-use medium without concanavalin A, phorbol myristate acetate, PHA, lipopolysaccharide or other inducers.

1000345 10 ml  
1000348 50 ml

## T-Cell Plus™

- Natural source of human IL-2.
- Convenient, ready-to-use supplement.
- Stimulates blast formation.

T-Cell Plus™ growth supplement is prepared from the conditioned medium of a human T-cell leukemia cell line providing a natural source of human IL-2. T-Cell Plus™ stimulates blast formation in peripheral blood leukocytes which allows for the maintenance and amplification of lymphotropic viruses such as HIV.

## T-Cell Plus™

A convenient, ready-to-use growth supplement.

1000445 10 ml  
1000448 50 ml



# Solutions

## TCH™ and TCM™ Defined Serum Replacements

- The low and defined protein content facilitates downstream processing.
- The absence of hormones and growth factors permits detailed investigations into their function.
- There is no risk of mycoplasma, endotoxin or viral contamination as associated with serum.
- Lot-to-lot consistency guarantees excellent performance with every use.
- There is no interference with mitogens, inhibitors, lipids, bacterial toxins typically present in serum.
- The special formulation results in improved economy, reduced labor and permits "no-freeze" storage eliminating thawing time.

Traditional serum replacements are designed for just one or a very small number of specific cell types. Generally, they contain growth factors and steroid hormones which influence growth and proliferation of particular cell types. As a result, they do not support the vast majority of cell types. Additionally, the majority of these replacements lack essential fatty acids vital to growth and typically include only cholesterol as the lipid source.

ICN's TCH™ and TCM™ supplement a broad spectrum of cell types, independent of species and tissue type, adherent or suspension grown. These unique serum replacements provide consistent growth environments and exhibit excellent results in the long-term culturing of anchorage-dependent and suspension cultures. Furthermore, they offer the distinct advantage of eliminating various contaminating factors associated with serum.



## TCH™

A fortified, multipurpose serum replacement specialized for most human cell types with proven results for research and production applications. It is supplied as a 50X concentrate with complete instructions for adapting cells to a serum-free environment.

2020026	2x10 ml
2020049	100 ml
2020022	2x100 ml

## TCM™

A fortified, multipurpose serum replacement specialized for a very large range of non-human mammalian cell types with proven results for research and production applications. It is supplied as a 50X concentrate with complete instructions for adapting cells to a serum-free environment.

2010026	2x10 ml
2010049	100 ml
2010022	2x100 ml

## TM-235™

A fortified, multipurpose serum replacement similar to TCM™ but developed specially for fastidious cell lines. It contains additional components for cells with higher serum requirements. It is supplied as a 50X concentrate with complete instructions for adapting cells to a serum-free environment.

2040026	2x10 ml
2040022	2x100 ml

## VaxMax™ Serum Extender

This economical, convenient reagent reduces the total serum requirement for most cell cultures. With VaxMax™, cells such as MDBK, MDCK, vero, CRFK and swine testicle have demonstrated remarkable yields. It is highly recommended for veterinary vaccine manufacturing as it enhances production while reducing expense. Typically, VaxMax™ supplements 0.5-1.0% serum.

2050049	100 ml
2050054	500 ml

## ITS™ Premix

ITS™ Premix stimulates cell proliferation while substantially reducing serum requirements for many cell types. This convenient preparation contains insulin, transferrin and selenium. When used in basal medium supplemented with as little as 2% FBS, it supports diploid and heteroploid cell proliferation at rates equivalent to cultures using 10% FBS. Each vial supports 5 liters of medium.

2001227	1 vial
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## Cell Culture Supplements

ICN's cell culture additives and supplements have been prepared to strict guidelines. They have been sterile filtered and screened for endotoxin.

### Alsever's Solution

A sterile filtered solution with no detectable endotoxin.

2801149	100 ml
2801154	500 ml

### BME Amino Acids

A 100X concentrate without L-glutamine.

1600149	100 ml
1600154	500 ml

### BME Vitamins

A 100X concentrate without L-glutamine.

1600449	100 ml
1600454	500 ml

### Collagen Solution

A sterile 3 mg/ml, Cell Culture Grade, solution derived from bovine.

151458	150 mg
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### Collagen Solution

A bovine derived 0.3% collagen solution with 0.1% acetate.

193492	20 ml
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### EDTA

A 0.02% (w/v) preparation in normal saline. Store at 15-30°C.

2820349	100 ml
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### EDTA

A 2.0% (w/v) preparation in PBS without calcium or magnesium. Store at 15-30°C.

2820549	100 ml
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### L-Glutamine Solution

A 200 mM sterile filtered solution.

1680146	20 ml
1680149	100 ml

### MEM Amino Acids

A 50X concentrate without L-glutamine.

1601149	100 ml
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### MEM Non-Essential Amino Acids

A 100X concentrate without L-glutamine.

1681049	100 ml
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### MEM Vitamins

A 100X concentrate.

1601449	100 ml
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### Non-Enzymatic Cell Dissociation Reagent

A 1X sterile filtered liquid with no detectable endotoxin.

1676949	100 ml
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### Primatone® RL

A 50X concentrate for research applications only.

2751049	100 ml
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### Sodium Pyruvate Solution

A 100 mM sterile filtered solution.

1682049	100 ml
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### Sodium Pyruvate Solution, Gold Standard

A 100 mM sterile filtered solution. Endotoxin: <0.03 u/ml.

1683049	Sodium Pyruvate Gold Std. 100 mM. 100 ml
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### Kaolin 25%

A sterile filtered solution.

2801349	100 ml
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### Trace Element Solution 1

A 1000X sterile filtered solution. Please enquire for formulation.

1676549	100 ml
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### Trace Element Solution 2

A 1000X sterile filtered solution. Please enquire for formulation.

1676649	100 ml
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### Trace Element Solution 3

A 1000X sterile filtered solution. Please enquire for formulation.

1676749	100 ml
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### Trypsin 2.5%

A 2.5% (w/v) trypsin 1:250 solution in HBSS without calcium, magnesium and phenol red.

1689349	100 ml
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### Trypsin 2.5%, Gold Standard

A sterile filtered 2.5% (w/v) trypsin 1:250 solution in 0.9% saline. Endotoxin: <0.03 u/ml.

1689549	100 ml
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### Trypsin 0.25%

A 0.25% (w/v) trypsin 1:300 solution in HBSS with penicillin, 100 µg/ml streptomycin and 0.5 g/l sodium bicarbonate; without calcium, magnesium and phenol red.

1689454	500 ml
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### Trypsin-EDTA

A 0.05% (w/v) trypsin 1:250 and 0.02% (w/v) EDTA solution.

1689149	100 ml
1689154	500 ml

### Trypsin-EDTA

A 0.25% (w/v) trypsin 1:250 - EDTA solution.

1689649	100 ml
1689654	500 ml

### Trypsin-EDTA, Gold Standard

A 0.05% (w/v) trypsin 1:250 and 0.02% (w/v) EDTA solution. Endotoxin: <0.03 u/ml.

1689249	100 ml
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### Trypsin Neutralizer Solution

A 1X sterile filtered solution.

1676849	100 ml
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### Tryptose Phosphate Broth

A 29.5 mg/ml premixed solution.

1682149	100 ml
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### Yeast Extract

A 25% (w/v) solution.

3000049	100 ml
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## Balanced Salt Solutions

### Earle's Balanced Salt Solutions (EBSS)

Cat. No.	Description	Quantity
1800049	1X Liquid	100 ml
1800054		500 ml
1800254	1X Liquid, without phenol red	500 ml
1800449	1X Liquid, without calcium and magnesium	100 ml
1800454		500 ml

### Hanks' Balanced Salt Solutions (HBSS)

Cat. No.	Description	Quantity
1810049	1X Liquid	100 ml
1810054		500 ml
1810254	1X Liquid, without phenol red	500 ml
1810449	1X Liquid, without calcium and magnesium	100 ml
1810454		500 ml
1810554	1X Liquid, without calcium, magnesium, and phenol red	500 ml
1810154	Gold Std., 1X Liquid without calcium, magnesium	500 ml
1810354	Gold Std., 1X Liquid, without calcium, magnesium and phenol red	500 ml
1810654	Gold Std., 1X Liquid, without calcium, magnesium	500 ml
1910149	10X Liquid, without sodium bicarbonate	100 ml
1910154		500 ml
1910649	10X Liquid, without sodium bicarbonate, calcium and magnesium	100 ml
1910654		500 ml
1910554	Gold Std., 10X Liquid, without calcium, magnesium, phenol red, sodium bicarb.	500 ml

### Phosphate Buffered Saline (Dulbecco's PBS) Solutions

Cat. No.	Description	Quantity
1860049	1X Liquid	100 ml
1860054		500 ml
1861054	1X Liquid, without magnesium chloride, and magnesium sulfate	500 ml
1860449	1X Liquid, without calcium and magnesium	100 ml
1860454		500 ml
1860154	Gold Std., 1X Liquid	500 ml
1860554	Gold Std., 1X Liquid, without calcium and magnesium	500 ml
1960049	10X Liquid	100 ml
1960054		500 ml
1960449	10X Liquid, without calcium and magnesium	100 ml
1960454		500 ml
19610454	10X Liquid, without magnesium chloride and magnesium sulfate	500 ml
1960154	Gold Std., 10X Liquid	500 ml
1960554	Gold Std., 10X Liquid, without calcium and magnesium	500 ml

## Albumins

### Bovine

Cat. No.	Description	Quantity
810301	7% Sterile Monomer Standard	2 ml
810101	Path-O-Cyte™ 4	50 ml
810111	Path-O-Cyte™ 5	50 ml
810783	30% Enhanced Polymer Fract. V	50 ml
810784		1 liter
150269	30% Serological Solution	10 ml
		50 ml
		250 ml
150270	30% Stabilizer-free Serological Sol.	10 ml
		50 ml
		250 ml
810133	30% Sterile, Cap-free Solution	50 ml
810706	30% Non-sterile Solution	1 liter
100117	35% Cohn Fract. V Sterile Solution	50 ml
810061	35% Sterile Solution	50 ml

### Human

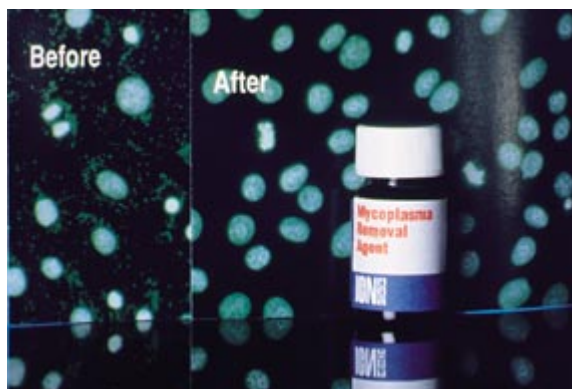
Cat. No.	Description	Quantity
810171	10% Fract. V Solution	50 ml
823051	30% Fract. V Solution	50 ml
103712	30% Solution	50 ml

## Decontamination Reagents and Accessories

### ICN Mycoplasma Removal Reagent

**A Unique Product Available Only From ICN**

- Completely *KILLS* mycoplasma
- Requires less than 7 Days.
- Demonstrates broad spectrum activity.
- It is "simple-to-use".
- Proven low in cytotoxicity.
- Effective at low concentrations.



The presence of mycoplasma in tissue and cell culture continues to be a serious problem often resulting in the loss of the cell line concerned. Since all cell lines are susceptible to contamination, whether they are plant or animal, primary or finite, or established, the potential scale of the problem is enormous. Currently, the incidence of mycoplasma contamination in culture varies widely, anywhere from 30 to 90%.

Mycoplasma Removal Agent (MRA) from ICN is a unique antibiotic formulation which eliminates cell culture mycoplasma in less than 7 days. It is a significant breakthrough in the eradication of mycoplasma in cell culture. MRA is a derivative of the quinoline family and has demonstrated its effectiveness at complete elimination of various types of mycoplasma contamination. It will actively KILL mycoplasma at a concentration of 0.5 µg/ml by inhibiting mycoplasma DNA gyrase. It is supplied as a ready-to-use solution capable of decontaminating up to 25 cultures. Both cellular toxicity and the regrowth of mycoplasma is rare when administered at the recommended concentration.

MRA has been cited by the European Collection of Animal Cell Cultures at Porton Down as being SUPERIOR to all other existing products in the elimination of mycoplasma (Mowles, Moran, and Doyle; Nature, 340, No. 3)

Cat. No.	Description	Qty.
3050044	MRA	5 ml

#### References:

1. Barile, M.F., J. Med. Sci., 17, 7 (1981).
2. Casemore, D.P., J. Clin. Pathol., 20, 298 (1967).
3. Fogh, J., Proc. Soc. Exp. Biol. Med., 117, 899 (1964).

## Antibiotics

Cat. No.	Description	Quantity
1672346	Amphotericin B, 250 µg/ml	20 ml
1672348		50 ml
1672148	Aureomycin (Chlortetracycline), 5 mg/ml	50 ml
1672546	G418 Sulfate, 50 mg/ml	20 ml
1672548		50 ml
1676045	Gentamicin Sulfate, 10 mg/ml	10 ml
1676245	Gentamicin Sulfate, 50 mg/ml	10 ml
3050044	Mycoplasma Removal Agent, 50 µg/ml	5 ml
1672048	Kanamycin, 5 mg/ml	50 ml
1670046	Penicillin-Streptomycin, 100X Liquid	20 ml
1670049	5,000 IU/ml Pen.; 5 mg/ml Strep.	100 ml
1670149	Penicillin-Streptomycin, Gold Std., 100X	100 ml
1670249	Penicillin-Streptomycin, 200X Liquid	100 ml
	10,000 IU/ml Pen.; 10 mg/ml Strep.	
1670349	Penicillin-Streptomycin, Gold Std., 200X	100 ml
1674046	Penicillin-Streptomycin-Amphotericin B	20 ml
1674049	10,000 IU/ml Pen.; 10 mg/ml Strep.;	100 ml
	25 µg/ml Amph.	
1672248	Tylosin, 5 mg/ml	50 ml

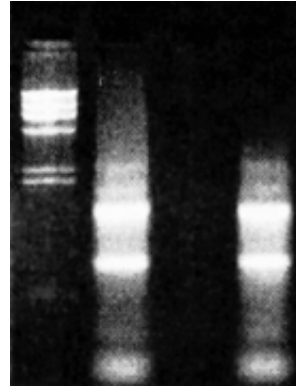


# Solutions

## RNase-Erase™

- Completely removes RNase contamination from glass and plastic surfaces.
- Proven effective at removing high concentrations of RNase contamination where similar products fail.
- Ideal for cleaning work surfaces, pipettes, and equipment that must be RNase-free.
- No more baking glassware or using DEPC solutions to eliminate RNase from surfaces.

Working with RNA requires special measures to be taken to assure an RNase-free environment. Even trace quantities of RNase can lead to lower yields during *in vitro* transcription reactions, degradation during RNA purification protocols, and variable results in RPAs and Northern transfers. To help combat the ubiquitous presence of RNase, ICN offers RNase Erase™ - a cleaning agent that efficiently and effectively removes ALL traces of even the highest levels of RNase contamination. This reagent contains three ingredients active against RNase and has proven to be extremely remarkable at removing RNase contamination from glassware, plastic surfaces, countertops, and pipettes in all research settings. Furthermore, it has been proven effective at eliminating RNase contamination from microcentrifuge tubes without inhibiting subsequent enzymatic reactions.



### Removal of dried-on RNase contamination.

Five micrograms of RNase A was vacuum-dried at the bottom of two microcentrifuge tubes. One tube was then rinsed three times with water, and the other was rinsed once with RNase Erase™ and then twice with water. Two micrograms of total RNA from mouse liver were added to each of the microcentrifuge tubes, incubated at 37°C for 30 minutes and then loaded on a 1.5% agarose gel.

### RNase-Erase™

821682	Spray Bottle	250 ml
821683	Dropper Bottle	2x250 ml
821684	Refill Bottle	250 ml

### DNA-Erase™

- Completely removes DNA contamination.
- Eliminates PCR artifacts.
- Convenient, ready-to-use formulation.
- Non-corrosive and non-carcinogenic.
- Room temperature stable and heat resistant.

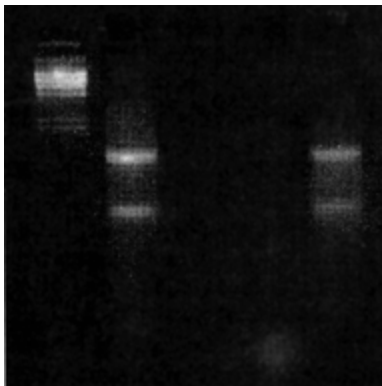
### DNA-Erase™

A cleaning solution for removing DNA contamination and PCR artifacts from all laboratory surfaces and apparatus. It is a stable, non-corrosive, ready-to-use solution.

821805	500 ml
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Solutions



### Comparison of available cleaning products for RNase removal.

Two micrograms of total RNA from mouse liver was added to each microcentrifuge tube that was precontaminated with RNase A and then cleaned using different commercially available RNase decontamination products- "a", "b", "RNase Erase™." The tubes were then rinsed twice with water prior to the addition of the mouse liver RNA in 20 microliters of TE. The samples were incubated at 37°C for 30 minutes, and then 10 microliters of the sample was resolved on a 1.5% agarose gel (TAE) and visualized on a UV light box.

## DNase, RNase-Free Water

- DEPC treated and specially purified.
- Sterile-filtered for maximum purity.
- Ideal for the most critical procedures.

Perfect for use with DNA-Erase™ and RNase-Erase™ decontamination solutions.

## DNase, RNase-Free Water

Deionized water treated with 0.001% DEPC, sterile filtered through 0.2 micron filters and then autoclaved.

821739 500 ml



808026 RT	<b>DEKASOL™</b> Decontamination solution for radioactive cleanup	1 gal 4x1 gal
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## Miscellaneous Solutions

101025 0-5°C	<b>D-BIOTIN SOLUTION</b> [22879-79-4] Crystalline 25 γ per cc.	6x1 amp
195186 RT	<b>FOLIN &amp; CIOCALTEU'S PHENOL REAGENT</b> 2.0 Normal Used in protein determination by Lowry method. Ref.: Lowry, O.H., et al., J. Biol. Chem., <b>193</b> , 265 (1951).	500 ml 1 liter
821827 0-5°C	<b>FORMAZOL®</b> A specially purified and stabilized formamide for use as an RNA solubilizer. It is unlike any other commercially available formamide. Benefits: • Protected from RNase Degradation • Stable for one year at +4°C • Permits High Sample Volume applied to Formaldehyde-Agarose Gel Ref.: Chomczynski, P., Nucleic Acids, <b>20(4)</b> , 3791-3792 (1992).	25 ml
11411 -20°C	<b>FLUOROSTAB</b> Embedding medium	25 ml
11400 -20°C	<b>FLUOROTEC</b> Embedding medium	25 ml
55828 -20°C	<b>FREUND'S COMPLETE ADJUVANT</b>	50 ml
642851 0-5°C	<b>FREUND'S ADJUVANT Complete</b> This product is made by a modification of Freund's technique, in which 25 mg of <i>Mycobacterium</i> is suspended in a mixture of 7.5 ml Arlachel A and 42.5 ml paraffin oil.	50 ml
195187 0°C	<b>FREUND'S ADJUVANT Complete</b> Contains 1 mg <i>Mycobacterium tuberculosis</i> per ml, heat killed and dried; 0.85 ml paraffin oil, 0.15 ml mannide monooleate.	6x10ml
55829 -20°C	<b>FREUND'S INCOMPLETE ADJUVANT</b>	50 ml
642861 0-5°C	<b>FREUND'S ADJUVANT Incomplete</b> This product is made without <i>Mycobacterium</i> and contains 7.5 ml Arlachel A and 42.5 ml paraffin oil.	50 ml
155269 RT	<b>LUGOL SOLUTION</b> (Iodine/Potassium iodide solution)	100 ml 1 liter
194801 RT	<b>MINERAL OIL Molecular Biology Reagent</b> 1 ml = approx. 0.84 gm For PCR applications. Each vial contains 1.5 ml.	1 vial 5 vials
622701 0-5°C	<b>MOUNTING MEDIUM, IMMUNO-FLUORE™</b> This medium is designed for immunofluorescent preparations and is based on a solution of gelvatol with stabilizer to withstand prolonged exposure to ultraviolet light and to inhibit fading upon storage.	25 ml
980631 0-5°C	<b>PROTEXIDASE™</b> Peroxidase Protective Buffer which stabilizes HRP conjugates. It is compatible with all common blocking agents including Bovine Serum Albumin, skim milk powder, and TWEEN 20. Protexidase provides stability of the HRP enzyme and it also inhibits microbial growth. Supplied in ready-to-use form, Protexidase is recommended for extended storage of highly diluted horseradish peroxidase conjugates. It can be stored for up to one year at 2-8°C and allows for dilutions up to 1:16,000.	500 ml

Solutions



# Solutions

## Liquid Scintillation Cocktails

### Environmentally Safe\* and Biodegradable

Rapidly degrades into CO<sub>2</sub> and water under normal biodegradation conditions.\*\*

### Non-toxic

All environmentally safe liquid scintillation cocktails are manufactured to be non-hazardous requiring no special handling or storage.

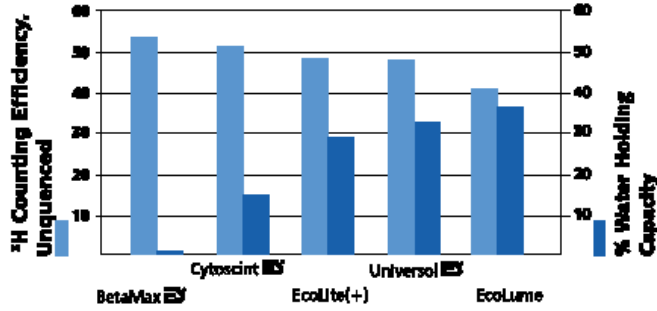
### Nonflammable

High flash point and virtually odorless.

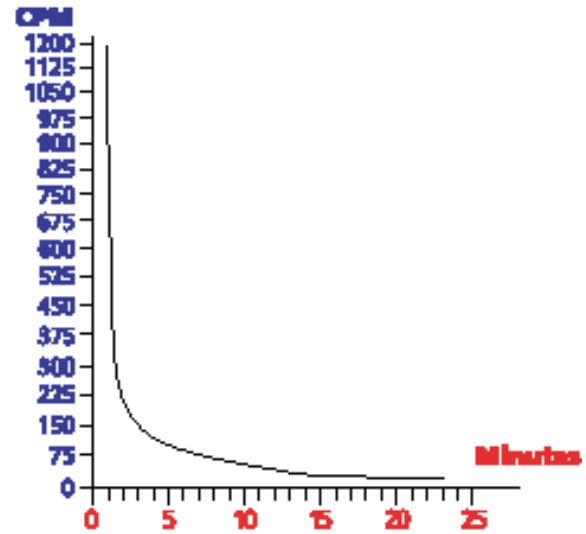
\*Environmentally safe in accordance with EPA regulations, (Resources Conservation and Recovery Act, CFR Title 40, Part 261.20 to 261.24).

\*\*Consult your Radiation Safety Officer (RSO) for local disposal regulations.

How to select the right cocktail for your application



Chemiluminescence decay when using a tissue solubilizer in Cytoscint™ ES.  
Tissue solubilization - 1 ml of 1M Hyamine Hydroxide in 10 ml of Cytoscint™ ES.



Counts after 22 minutes were either background or allowable statistical variation from background and thus disregarded.

882453

1 gallon  
4 x 1 gallons  
5 gallons

Solutions

### Cytoscint™ ES

A high efficiency, ready-to-use LSC designed for ONE-STEP counting of filters, Thin-Layer Chromatography scrapings and more. The special formulation resists chemiluminescence provoked by samples containing peroxides, alkaline bases and tissue solubilizers such as Hyamine Hydroxide®. Low viscosity allows rapid penetration of most filters including glass fiber and cellulose acetate. For most samples containing minimal amounts of water (0-15%), CytoScint™ ES results in increased count recovery and maximum sample solubilization. The presence of small water amounts actually enhances the solubilization of most samples. Additionally, Cytoscint™ ES resists quenching from agents such as alcohol and organic solvents.

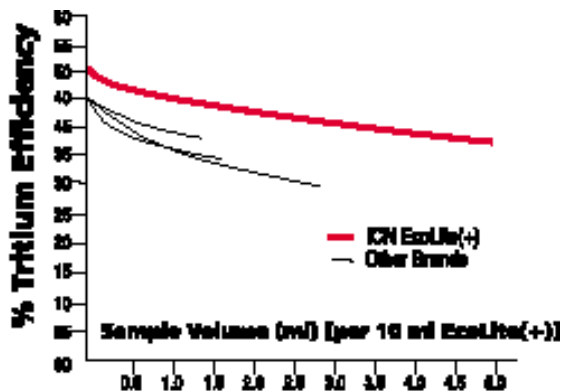
® Trademark Rohm & Haas



### EcoLite™ (+)

EcoLite™ (+) can be used for virtually all aqueous and non-aqueous samples. It is particularly useful for HPLC fractions, urea, phosphate buffers, protein digests, urine and many other samples where conventional LSCs fail to provide homogeneous counting solutions. EcoLite™ (+) is extremely efficient with <sup>3</sup>H and <sup>14</sup>C samples and remains monophasic from 0-30% load capacity. The tritium efficiencies approach 50% without loss of sample holding capacity typical of other brands of LSC. EcoLite™ (+) will not diffuse into or through polyethylene vials, thus eliminating erroneous external standard quench measurements resulting from vial wall diffusion effects.

Sample volume vs <sup>3</sup>H efficiency.



882475

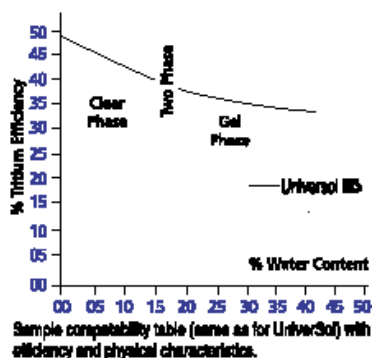
1 gallon  
4 x 1 gallons  
5 gallons



## Universol™ ES

The physical characteristics of Universol™ ES are identical to traditional "triton and toluene" type commercial cocktails. Aqueous samples from 0-5% load capacity count as a clear solution. Samples with high ionic concentrations will count most efficiently in this region. From approximately 20% to nearly 40% load capacity, Universol™ ES becomes a translucent gel that is beneficial for suspending particulate samples or samples which phase due to salt concentration or molecular size.

**Special characteristics of Universol ES:**  
Phase diagram showing efficiency and physical characteristics.



882480

1 gallon  
4 x 1 gallons  
5 gallons



## BetaMax™ ES

As its name implies, BetaMax™ ES provides the most efficient beta particle counting of non-aqueous samples. Its formulation works very well with most non-aqueous samples and organic samples extracted from aqueous mixtures. BetaMax™ ES is excellent for completely dried samples that have been recovered on filters of all types. Also, it is a good choice for dry filters and test wipes. Since BetaMax™ ES is completely immiscible with aqueous solutions, it is the preferred cocktail for researchers conducting <sup>3</sup>H Acetyl-CoA CAT assays.

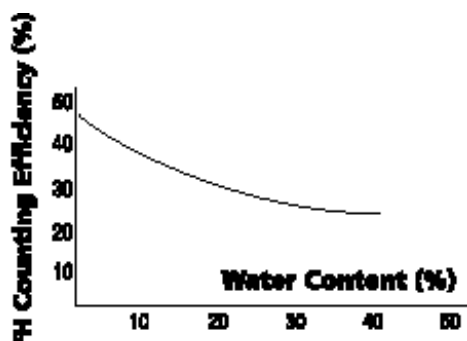
880020

1 gallons  
4 x 1 gallons

## EcoLume™

The original environmentally safe LSC is a true and complete general-purpose cocktail. EcoLume™ will accommodate a vast range of aqueous and non-aqueous samples, e.g. deionized water, PBS, PBS with gelatin or BSA, sucrose gradients, salt solutions, 0.1 N HCl, NaOH, urine, serum, alcohols, acetonitrile, steroids, lipids and more. It forms no gel and will not phase with addition of sample up to its maximum load capacity, even with the addition of aqueous samples up to 40% (v/v) at room temperature. The special formulation accommodates moderate to large aqueous samples and those with high ionic concentration.

Counting efficiency vs H<sub>2</sub>O content.



882470

1 gallon  
4 x 1 gallons  
5 gallons

## Hyamine Hydroxide®

For trapping CO<sub>2</sub> and as a solubilizer for biological tissue samples and polyacrylamide gel slices.

802387

500 ml

Solutions