

# lab basics

www.mpbio.com / www.mgp.cz

MP Biomedicals is a world-leading supplier of products for life science research for over 50 years. We strive to meet your needs in the lab.





#### **MP Premium Dextran Sulfate Sodium Salt (DSS)**

Colitis Research Grade (36,000 - 50,000 m.wt.)

At least 3,000 Scientists Prove MP DSS is the Most Effective in the Industry! Let us **PROVE** it to you!

Customized
Animal Research Diets
Delivered Fresh
to Your Lab!



From small scale research to large scale manufacturing, we are there with you every step of the way.

## inside:

Equipment
Isolation Kits
Purification Kits
Chemicals
Media
Contamination Control
Lab Supplies
Radiochemicals

## <u>equipment</u>

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## **GRIND, LYSE and HOMOGENIZE any sample in a FLASH!**



The FastPrep- $24^{\text{TM}}$  5G Instrument is the latest version of the well-known FastPrep® system. This versatile sample disruption device gives the ultimate in speed and performance for the lysis of biological samples.

A completely self-contained system, the FastPrep- $24^{\text{TM}}$  5G Instrument eliminates the risk of cross-contamination and time-consuming clean-up associated with manual lysis method.

Samples and buffers are simply added to a Lysing Matrix tube containing specialized Lysing Matrix beads. The ergonomic design of the instrument ensures an easy loading of the sample tubes that remains securely sealed during the processing.

The homogenization speed and duration times are manually programmed using a touchscreen visual display. After setting your speed and time with the touch of a button, just push «run», and in less than a minute your samples are completely lysed!

Cat. No.	Description
116005500	FastPrep-24™ 5G Instrument





# FastPrep® Sample Holders Unique versatility in sample number, size and temperature conditions







Cat. No.	Description
116002528	CoolPrep™ Sample Holder (24 x 2 mL)
116002530	CoolTeenPrep™ Sample Holder (6 x 15 mL)
116002531	CoolBigPrep™ Sample Holder (2 x 50 mL)
116002526	TeenPrep™ Sample Holder (12 x 15 mL)
116002525	BigPrep™ Sample Holder (2 x 50 mL)
116002512	QuickPrep™ Sample Holder (24 x 2 mL)
116002527	HiPrep™ Sample Holder (48 x 2 mL)
116002540	TallPrep™ Sample Holder (24 x 4.5 mL)
116002545	All Metal QuickPrep™ Sample Holder (24 x 2 mL)
116002546	All Metal TeenPrep™ Sample Holder (12 x 15 mL)
116002547	All Metal BigPrep™ Sample Holder (2 x 50 mL)



#### **NEW**



## Lyse your samples in 5 Seconds wherever you are!

An innovation in the sample lysis industry, the SuperFastPrep-2 instrument is a portable omnidirectional bead beating system with a unique, patent pending balanced crankshaft-slider mechanism generating efficient sample homogenization.

## Powerful, Portable, Sample Lysis at your Fingertips

Cat. No.	Description	Pack Size
116011500	Super FastPrep-1	Each
116011510	Field Carrying Case	Each
116011520	Voltage Converter	Each

## FastPrep-96<sup>™</sup> - The Ultimate in High-Throughput Sample Preparation

- High Throughput Process up to 192 samples simultaneously in 2 x 96 deep well plates (included)
- Exceptional Versatility Interchangeable sample holders available: 96 x 2 mL tubes, 48 x 4.5 mL tubes, 24 x 15 mL tubes, 8 x 50 mL tubes, and 2 x 250 mL flasks
- Fast Processing Speed 1800 Oscillations/min

 True Linear Motion - Eliminates the need to re-orient plates mid-cycle

#### **EFFICIENTLY LYSE:**

Human and animal tissues, Tumors, cultured cells Leaves, seeds, stems, roots Bacteria gram + or -Yeast, fungi, spores Feces, soil, sediments, Food samples



Cat. No.	Description	
116010500	FastPrep-96™ Instrument (includes 2 x 96 well plate	
	Sample Holder)	





## equipment

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### **MPure-12**<sup>™</sup>

## **Automated Nucleic Acid Purification System**

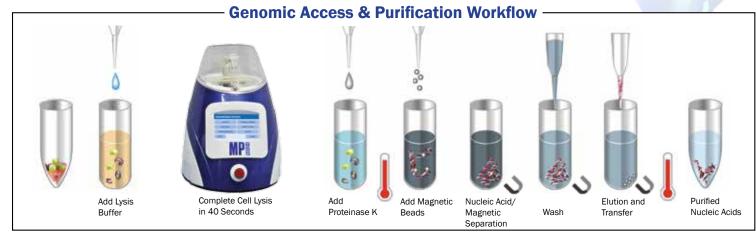
- · Fully Automated
- · High Reproducibility
- · Highest Yield & Purity
- Flexibility & Simplicity
- No Cross-contamination
- Scalability, ease of use and convenience

Process up to 12 samples in a true walk away system.

The MPure-12<sup>™</sup> allows rapid purification of nucleic acids from a wide variety of environmental samples using magnetic bead separation technology.

Combined with a uniquely designed magnetic bead processing chamber, the fully integrated and easy-to-use pre-packaged reagent kits offer superior yields of nucleic acids and high-quality results at an affordable price.







#### 15 Reagent Kits to Purify DNA & RNA from Any Sample Type!

Description	Pack Size
MPure-12™ system	1 unit
MPure-12 <sup>™</sup> Bacterial DNA extraction kit	48 preps
MPure-12™ Viral/Pathogen Nucleic Acids extraction kit B	48 preps
MPure-12 <sup>™</sup> Cell & Tissue total RNA extraction kit	48 preps

visit www.mpbio.com for complete list of reagent kits.





## isolation/purification

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#### Make your experiments easy with the FastPrep extraction kits

Ready-to-Use Protocols for DNA, RNA and Protein Isolation

- Rapid and reproducible sample lysis and purification process
- No cross contamination with closed Lysing Matrix tubes
- Increased yields of high quality DNA, RNA and proteins
- Integrity and size of DNA, RNA and proteins are retained
- Nucleic acids and proteins are ready-to-use in downstream applications

Description	Cat. No.
FastDNA® Spin Kit for Soil	116560200
FastDNA® Spin Kit for Feces	116570200
FastDNA® Spin Kit	116540600
FastRNA® Pro Blue Kit	116025050
FastRNA® Pro Red Kit	116035050
FastRNA® Pro Green Kit	116045050
FastRNA® Pro Soil Kit	116070050
FastPROTEIN® Red Matrix	116550600
FastPROTEIN® Blue Matrix	116550400



Visit www.mpbio.com to see our complete line of Fast DNA, FastRNA Kits.

#### **ETBR Greenbag Disposal Kit**



Rapid concentration of ethidium bromide from large volumes of liquid into a "tea bag"

One bag of ETBr green bag can remove 10 mg of Ethidium Bromide from the solution. Each kit can remove 500 mg of Ethidium Bromide.

Cat. No.	Description	Pack Size
112350200	EtBr GREENBAG™ Disposal Kit	50 Bags
04806113	Ethidium Bromide - powder	5 g
04802511	4802511 Ethidium Bromide - solution	
	10 mg/mL	

#### **Spin Modules & Recovery Tubes**

Save time and purify larger DNA fragments due to less manipulation of bound DNA

SPIN Modules are applied in molecular biology for its ability to separate particles from solutions in a few seconds.



Cat. No.	Description	Pack Size
112080600	SPIN Module and Recovery Tubes	60 filters/ catch tubes
112080800	SPIN Module and Recovery Tubes	100 filters/ catch tubes





## isolation/purification

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#### **Achieve Optimal Lysing Performance - MP FastPrep® Lysing Matrix Tubes**

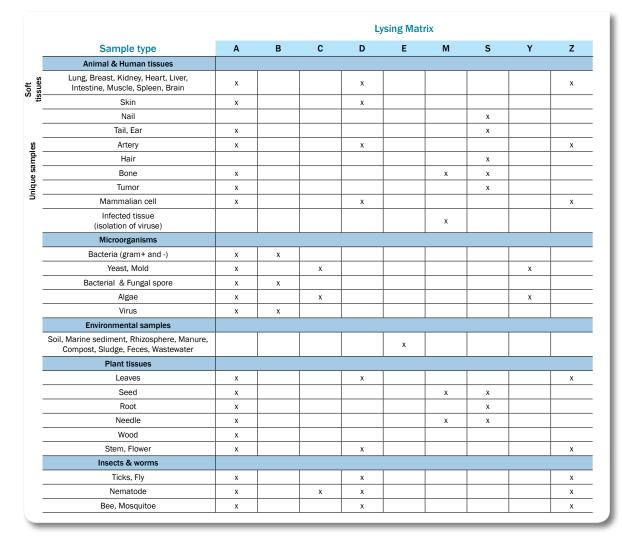
Lysing matrices are critical components of the FastPrep System which are prepared and dispensed under rigorous conditions. The result is a premium product that is ready to use with confidence.

Matrices are available separately for use with your own unique buffers, and are also components of our complete purification kits. Depending on your sample type and size, the Lysing Matrix are available in 2 mL, 4.5 mL, 15 mL, 50 mL tubes or 96-well plates.

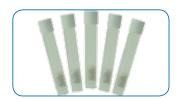
Pack Sizes	Product
50, 100 and 500 x 2 mL tubes	2 mL
25, 50 and 100 x 4.5 mL tubes	4.5 mL
5, 25 and 50 x 15 mL tubes	15 mL
10, 50, 100 and 500 x 50 mL tubes	50 mL
1 and 10 x 96 well plates	96-well plates (96 x 1.2 mL)

Thorough grinding of any sample

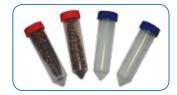
on any bead beater













#### **CIRCLEGROW®**

#### **Superior Plasmid Yield Through Enhanced Cell Growth**

Perfect for overnight or weekend cultures, CIRCLEGROW® Medium is a super-rich bacterial growth medium that produces up to three times more plasmid DNA than traditional growth medium.

CIRCLEGROW® Medium consists of a protein and amino acid source, biological buffer, and a complex carbon source that gets metabolized at a much slower rate than glucose. thus prolonging the cell cycle and preventing cell death during the log phase of growth.

Cells grown with CIRCLEGROW® Medium remain healthy for more than two days and continue to divide slowly after the log phase of the growth has been completed.

#### **Reduce Hands-On Work and Preparation Time**

CIRCLEGROW® cultures do not need to be constantly monitored by O.D. readings due to the incremental postlog cell growth. Obtain excellent yields of plasmid DNA from smaller culture volumes, and confidently leave cultures overnight or over the weekend.

CIRCLEGROW® Broth			
Use 40 grams (40 capsules) per liter.			
Cat. No.	Size		
	Powder		
113000112	227 g (0.5 lb)		
113000122	454 g (1 lb)		
113000132	908 g (2 lb)		
113000142	2.3 kg (5 lb)		
113000152	5 kg (11 lb)		
113000162	15 kg (33 lb)		
(	Capsules		
113000121	250 caps		
113000131	1000 caps		
113000141	2500 caps		
Ster	ile Solution		
113000104	500 mL		

#### **LB Medium Capsules!**

113002021

113002031

113002041

LB broth is the most widely used medium for the growth of bacteria. MP Biomedicals offers LB media in a variety of formats for convenience and ease of use.

Capsule format eliminates weighing, dust and cleanup Simply drop capsules in water and autoclave

	Use 25 grams (25 capsules or 5 large capsules) per lite Contents/liter: 10 g tryptone, 5 g yeast extract, 10 g Na		
	Cat. No.	Size	
Powder			
	113002022	454 g	
	113002032	1 kg (2.2 lb)	
	113002042	5 kg (11 lb)	
Capsules		Capsules	
113002011 227 g			

454 g (1 lb)

1 kg (2.2 lb)

5 kg (11 lb)

**LB Medium** 

113002051 15 kg (33 lb) Large Capsules 113002016 227 g (0.5 lb) 113002026 454 g (1 lb) 113002036 1 kg (2.2 lb) 113002046 5 kg (11 lb) Sterile Solution 113002014 500 mL

A large variety of LB Broth in stock or custom formulations available.





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## Lymphocyte Separation Medium (LSM)

#### **Get Peace of Mind in Cell Separation.**

MP biomedicals offers the highest quality in multiple size packs.

LSM has been cited in over 150 publications in the past 3 years!



Cat. No.	Description	Pack Size
0850494X	Lymphocyte Separation Medium - LSM  LymphoSep™ - Lymphocyte Separation Medium	100 mL
08540494		5x100 mL
091692249		100 mL
091692254		500 mL

#### **MonoPoly Resolving Medium**

Mono-Poly® Resolving Medium separates mononuclear and polymorphonuclear leukocytes from whole human blood in two distinct bands. Mono-Poly™ is highly versatile and can be used for a variety of research and clinical applications such as histocompatibility testing, lymphocyte studies, in vitro cell mediated immunity assays, or any procedure requiring pure white blood cell preparation.

it is the <u>only</u> Ficoll®-Hypaque medium which provides:

- Separation of mononuclear and polymorphonuclear leukocytes in two distinct bands.
- · Greater than 95% cell viability.
- · An easy, single step procedure.
- No sample dilution requirement or lysis of red blood cells

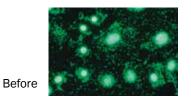
Cat. No.	Description	Pack Size
091698049	MonoPoly® Resolving Medium	100 mL

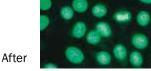
#### **Mycoplasma Removal Agents (MRA)**



## Eliminate mycoplasma contamination without harming your cell lines!

- Eliminate mycoplasma completely from contaminated cultures by inhibiting mycoplasma DNA gyrase.
- Obtain clean cultures within a week
- Kills most common mycoplasma strains
- Prevents mycoplasma contamination with low cytotoxicity
- Prevents re-contamination with MRA at low doses.





Cat. No.	Description	Pack Size
093050044	Mycoplasma Removal Agent	5 mL

#### **Zymolyase**

#### Lyse living yeast cell wall with ease!



Zymolyase is used to lyse living yeast cell walls to produce protoplast or spheroplast of various strains of yeast cells.

- Efficient lysis
- Lot to Lot conformity
- · High reproducibility

Cat. No.	Description	Pack Size
08320921	Zymolyase 20T from Arthrobacter luteus	1 g
08320932	∃Zvmolvase 100T. from Arthrobacter luteus ⊨	250 mg
08320931		500 mg



#### **Trypan Blue**

Trypan Blue is used in dye exclusion procedures for viable cell counting. The dye permeates into the dead cells, leaving the viable cells uncolored.

Cat. No.	Description	Pack Size
091691049	Trypan Blue	100 mL

#### **Urea Ultra Pure**

Urea Ultra pure is a mild agent usually used in the solubilization and denaturation of proteins. The proteins unfold and seperate into their constituent poly peptide chains. It is commonly used to solubilize and denature proteins for denaturing isoelectric focusing and two-dimensional electrophoresis and in acetic acid-urea PAGE gels. Urea is used in cell or tissue culture media to increase the osmolality.

Cat. No.	Description	Pack Size
04821519	Urea Ultra Pure	1 lb
04821527	Urea Ultra Pure	5 lb
04821528	Urea Ultra Pure	1 kg
04821530	Urea Ultra Pure	5 kg

#### **Accutase Cell Detachment Solution**

Accutase Cell Detachment Solution is effective in detaching primary fibroblasts, endothelial cells, neurons, tumor cells and insect cells. This reagent is useful for creating single cell suspensions from clumped cell cultures for accurate cell counting.

Cat. No.	Description	Pack Size
091000449	Accutase Cell Detachment Solution	100 mL

#### **Doxycycline Hydrochloride**

Doxycycline Hydrochloride is an antibiotic used to inhibit matrix metalloproteinases and used to inhibit the inflammatory response of Lyme Disease. This antibiotic is effective against gram + and gram - bacteria. and is commonly used to treat a variety of infections. It is a broad spectrum antibiotic and bacteriostatic.

Cat. No.	Description	Pack Size
0219504401	Doxycycline Hydrochloride	1 g
0219504405	Doxycycline Hydrochloride	5 g
0219504410	Doxycycline Hydrochloride	10 g



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#### **Trehalose Dihydrate**

Trehalose dihydrate is a natural alpha-linked non-reducing disaccharide formed by an  $\alpha,\alpha$ -1,1-glucoside bond between two  $\alpha$ -glucose units which yields 2 moles of D-glucose upon acid hydrolysis. Has 90% of the calorific content of sucrose. Inhibits polyglutamine-mediated protein aggregation both in vivo and in vitro.

Trehalose has also been used in several biopharmaceutical monoclonal antibody formulations.

It is also used as a protein-stabilizing agent in research. Use as a cryoprotectant in a variety of cell freezing media.



Cat. No.	Description	Pack Size
0210309780	D-(+)- Trehalose Dihydrate	100 g

#### **CHAPS®**

CHAPS is a detergent useful for solubilizing membrane proteins. Frequently used prior to electrophoresis since it generally does not denature the proteins. It can also



be used as a non toxic stabilizing agent for growth factors.

CHAPS combines features of bile salts and N-alkyl sulfobetaines. Better at solubilizing proteins than structurally-related carboxylic acid anions and is much more effective at breaking protein-protein interactions than either sodium cholate or TRITON® X-100 Detergent. Capable of solubilizing the opiate receptor to a state exhibiting reversible binding of opiates. Also, capable of disaggregating cytochrome P450 to its monomeric form without denaturation.

Cat. No.	Description	Pack Size
04808196	CHAPS®	5 g

## MP Premium Dextran Sulfate Sodium Salt (DSS)

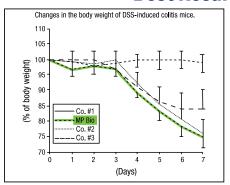
#### The Gold Standard in Colitis Research



At least 3,000 Scientists Prove MP DSS is the Most Effective in the Industry!

Let us **PROVE** it to you!

## High Purity, Reproducible Quality! Best Results!



The mice were fed normal chow and 2.0% wt/wt DSS in water for 1 week and then sacrificed. The weight of individual mice was monitored daily. The data represent means=SD (data obtained from Bamba et.al., 2012)

- Validated by 3,000+ scientific publications
- Highest purity (99%) and stability
- Offers Highest Sulfur content (18-20%)
   < 0.2% free sulfate</li>
- Highest efficiency
- Best value in the industry.

## **MP Premium DSS - The World's Most Potent Intestinal Inflammation Reagent**

Cat. No.	Description	Pack Size
0216011050	DSS - Colitis Grade	50 g
0216011080	DSS - Colitis Grade	100 g
0216011090	DSS - Colitis Grade	500 g



#### **PBS Tablets**

#### Ideal for any Immunoassay procedures!

Serves as an irrigating, transporting and diluting fluid while maintaining intra- and extracellular osmotic balance



Cat. No.	Description	Pack Size
092810305	PBS Tablets	100 tabs
092810306	PBS Tablets	200 tabs
092810307	PBS Tablets	500 tabs

#### **Histopaque 1077**

Histopaque™1077 is a solution of polysaccharide (FicoII-400) and a radiopaque contrast medium (sodium diatrizoate).Low viscosity of FicoII® is used for lymphocyte isolation procedure involving a short, low speed centrifugation. A solution of FicoII® and sodium metrizoate of the proper density and osmotic strength is placed in a centrifuge tube. Blood is layered on top, and the two-phase system was centrifuged at a low speed for a short time. The erythrocytes and granulocytes sediment to the bottom of the tube. Because of lower density, the lymphocytes

are found at the interface between the plasma and the Ficoll-Paque with other slowly sedimenting particles (platelets and monocytes).



Cat. No.	Description	Pack Size
0219083780	Histopaque® 1077	100 mL

#### **Mylar Plate Sealer**

Protect microplate well contents with the Mylar Plate Sealer from MP Biomedicals. Assure a tight seal in cell culture, ELISA, incubation, Fluoreschence, high-throughput, microbiology and PCR. Mylar plate sealers are gas permeable. Acetate and mylar sealers are NOT autoclavable.



Cat. No.	Description	Pack Size
097640205	Mylar Plate Sealer	100 pack

#### **Plant Con**

PlantCon<sup>™</sup> -- a line of presterilized, disposable, plastic growth containers. This labware has been designed to reduce the time spent preparing an in vitro growth environment for plant cultures -- and to minimize the risk of contamination.



Instead the PlantCon™ system permits you to start culturing plant cells and plantlets with the following advantages: Unbreakable – Safe to use, Presterilized – Easy to use, Clear plastic – Excellent light transmission, Disposable – Eliminates messy glass cleanup, Space Saving – Stackable, Manufactured under strict quality control procedures, Scientifically designed for plant cell culture, Special cover positioning – Special lugs in the cover lip allow the user to snap on the cover tight for handling or loose for free exchange of atmospheres.

Cat. No.	Description	Pack Size
092672202	Plantcon <sup>™</sup> Plant Tissue Culture (Sterilized)	10 pk
092672204	Plantcon™ Plant Tissue Culture (Sterilized)	50 pk
092672206	Plantcon™ Plant Tissue Culture (Sterilized)	200 pk



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#### **Acrylamides**

We offer the highest purity available in three different forms. Choose from traditional powder to use your own way,

premixed powder which reduces spillage, waste and tedious weighing or premixed solutions for added convenience

in your lab.

Cat. No.	Description	Pack Size
04814326	Acrylamide, Ultra Pure, ≥99.9%	5 mL
04814329	Acrylamide, Ultra Pure, ≥99.9%	1 kg
04800175	Bis-Acrylamide, Ultra Pure, ≥99.9%	250 g

#### **Phenois**

Phenol is used as a reagent in chemical analysis. It is used in the manufacture of colorless or light-colored artificial resins, many medical and industrial organic compounds and dyes. It is commonly used in tissue preservation and DNA/RNA extraction with chloroform.

Cat. No.	Description	Pack Size
11AQUAPH01	AquaPhenol™	250 mL
11RYRED001	Ready-Red ™	250 mL
11AQUARED1	Aquaphenol - Ready-Red Kit	250 mL
04813061		100 g
04813063	Cesium chloride, ultra pure	500 g
04813069		1 kg
0219400225		25 mL
0219400280	Chloroform, mobio reagent 99+%	100 mL
0219400290		500 mL
0219400291		1 L
04802517	Phenol chloroform saturated solution, pH 4.5	400 mL
04802514	Phenol chloroform saturated solution, pH 5.2	100 mL
04802515	Phenol chloroform saturated solution, pH 5.2	400 mL
04802519	Phenol chloroform saturated solution, pH 6.6	400 mL
04802521	Phenol chloroform saturated solution, pH 6.7	400 mL
0219605780	Trichloroacetic acid solution	100 mL

#### **Premixed Acrylamide Formulations**

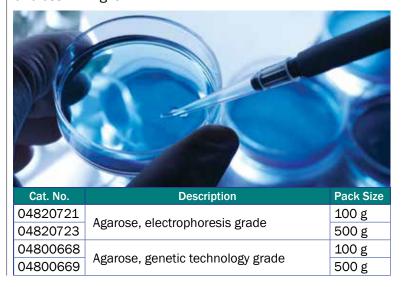
We supply Ultra Pure Acrylamide and Ultra Pure N, NI-Methylene-bis-acrylamide formulations in your choice of three different ratios. Just add the appropriate volume of deionized water to form a stock solution stable for up to one month at 4°C.

- For 30 g powder, add 73.5 mL deionized water to prepare 100 mL of stock solution.
- For 200 g powder, add 490 mL deionized water to yield 665 mL of stock solution.

Cat. No.	Description	Pack Size
04800655	Acrylamide/Bis-Acrylamide 19:1	30 g
04800656	Acrylamide/Bis-Acrylamide 19:1	200 g
04800657	Acrylamide/Bis-Acrylamide 29:1	30 g
04800660	Acrylamide/Bis-Acrylamide 37.5:1	200 g
04800802	Liqui-Gel™ 19:1	500 mL
04800803	Liqui-Gel™ 29:1	500 mL
04800804	Liqui-Gel™ 37.5:1	500 mL

#### **Agaroses**

Agarose is useful in separation of nucleic acids electrophoretically because agarose gels have larger pore sizes than cross linked acrylamide gels at low concentrations and in chromatographic separations by either beading the agarose or cross-linking it.



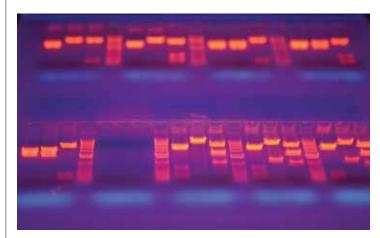


#### **Electrophoresis Reagents**

Cat. No.	Description	Pack Size
04802811	Ammonium persulfate	25 g
04802829	Ammonum persunate	100 g
04808211	Ammonium sulfate, ultra pure	1 kg
04808229	Allillolliulli Sullate, ultra pure	5 kg
0210128901	Casein, hammerstein grade	1 lb
04808274	Coomassie® Brilliant blue G-250	10 g
08980681	3,3' diaminobenzidine (DAB)	100 tabs
04856126	DTT, electrophoresis grade	5 g
0219482105	DTT malegular biology reagent	5 g
0219482125	DTT, molecular biology reagent	25 g
04800682	EDTA	500 g
04800683	EDIA	1 kg
0219517480	Ethylene glyco-bis	100 g
0219404790	Formaldehyde, ACS reag. grade	500 mL
04800687		500 mL
04800688	Glycerol, ultra pure	1 L
04800689		4 L
04808822	Glycine, electrophoresis grade	1 kg
04808831	Glycine, electrophoresis grade	5 kg
04820539	Guanidine hydrochloride, u.p.	500 g
04820540	Guarilaine nyarocillonde, a.p.	1 kg
04820991	Guanidine thiocyanate, r.g.	500 g
0210251601	DL-Ornithine monohydrochloride	1 g
0210251625	DL-Officialitie monoriyarochionae	25 g
0219483425	2 Mercaptoethanol	25 mL
0219064410	Ponceau S	10 g
04811032	Sodium dodecyl sulfate, u.p.	500 g
04811030	Socialii dodecyi sanate, u.p.	1 kg
0219895790	Sodium dodecyl sulfate, 20%	500 mL
0215004901	Strontovidin	1 mg
0215004905	Streptavidin	5 mg
04805615	TEMED, electrophoresis grade	50 mL
0215234680	TMD, liquid substrate	100 mL

O-1 No	Barret della	Devil Circ
Cat. No.	Description	Pack Size
AGAH0100	Agarose Mol Bio Grade	100 g
AGAH0500	Agarose Mol Bio Grade	500 g
AGAH0050	Agarose Low Melting Point	50 g
AGAPO100	Agarose Multipurpose	100 g
AGAP0300	Agarose Multipurpose	3 x 100 g
AGAR0025	Agarose High Resolution	25 g
AGARO050	Agarose High Resolution	50 g

Agarose gels are used in immunoelectrophoresis (IEP) and double-diffusion Ouchterlongy plates to demonstrate antibody-antigen reactions. Used in chromatographic separations by either beading the agarose or cross-linking it.



#### **Taq DNA Polymerase**

Recombinant form of the thermostable DNA polymerase from Thermus aquaticus, expressed in E.Coli. The enzyme is highly purified and is free of non specifi c endo- or exonucleases.

- · Highest performance and reliability
- · Highly processive

#### Tag CORE kits

Taq DNA Polymerase + dNTPs in one Kit

Taq CORE Kits contain all the reagents (presented as separate items) required for PCR: MP Biomedicals' high quality recombinant Taq DNA polymerase, high purity dNTPs Mix (>99%), optimized incubation buffers with and without MgCl and a separate MgCl solution.

Two types of kits are supplied with dNTPs at either 10 mM each or 25 mM each.

Cat. No.	Description
EPTQK109	Taq CORE Kit 10
	(with dNTPs at 10mM each)
EPTQK259	Taq CORE Kit 25
	(with dNTPs at 25mM each)



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#### **Protease Inhibitors**

Cat. No.	Description	Pack Size
0219350380	·	100 mg
0219350390	AEBSF	500 mg
0219350391		1 g
0215284305	Anting in hydrochloride	5 mg
0215284325	Antipain hydrochloride	25 mg
0219115810	Aprotinin A III /ma	10 mg
0219115825	Aprotinin, ~4 IU/mg	25 mg
0219038250	Aprotinin, analytical grade	50 mg
0219077910	Aprotinin colution, analytical grade	10 mL
0219077940	Aprotinin solution, analytical grade	40 mL
0219506825	Benzamidin hydrochloride hydrate	25 g
0215284405	Bestatin	5 mg
0215284425	Destatiii	25 mg
0215284610	E-64	10 mg
0215155305		5 mg
0215155325	Leupeptin hemisulfate	25 mg
0215155380		100 mg
0219536805		5 mg
0219536825	Pepstatin A	25 mg
0219536883		250 mg
0219538105	DMCE (show described outlessed fluoride)	5 g
0219538105	PMSF (phenylmethylsulfonyl fluoride)	25 mg
0215883701	Protease Inhibitor Cocktail Kit	1 kit

#### **Surfactants**

Cat. No.	Description	Pack Size
0210214783	Locithia fuere contessa	250 g
0210214790	Lecithin, from soybean	500 g
0219859680	Igelpal® CA-630 viscous liquid	100 mL
0210316890	Palvaarhata 20	500 mL
0210306891	Polysorbate 20	1 L
02194724.5	D	500 mL
0219472404	Polysorbate 20, Cell Culture Reagent	4 L
0219484180	Polysorbate 20, Molecular Biology Reagent	100 mL
04807423	TRITON™ X-100	100 mL
04807426		500 mL
02194725.1	TWEEN® 80, Cell Culture Reagent	100 mL

#### **Cell Culture Reagents**

Cat. No.	Description	Pack Size
0210138490	Choline bitartrate, Cell Culture Reagent, ≥98%	500 g
02199524.5	Calcium chloride, dihydrate,	500 g
0219952401	USP	1 kg
0219605580	Dimethyl sulfoxide, Cell Culture Reagent ≥99%	100 mL
0216000380	Ficol®	100 g
091690049	Phenol red 0.5% (w/v) solution	100 mL
0215684625	Thiamphenicol	25 g
0210293390	Thioglycolic acid sodium salt Bacteriological Grade, ≥97%	500 g
091689149	Trypsin-EDTA Solution	100 mL

#### **Solvents**

Cat. No.	Description	Pack Size
0230000804	Acetonitrile, HPLC/Spectro	4 L
0230000816	Grade, ≥99.9%	4x4L
0219400225		25 mL
0219400280	Chloroform, Molecular Biology	100 mL
0219400290	Reagent, 99+%	500 mL
0219400291		1 L
0215507880		100 mL
0215507891	Isoamyl alcohol, ≥99%	500 mL
0215507891		1 L
0219400690	Isopropyl alcohol, Molecular Biology Reagent, ≥99%	500 mL
0230014104	Methanol, HPLC/Spectro Grade, ≥99.9%	4 L
0230014116		4x4 L



## biochemicals/cell biology

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#### **Buffers**

Cat. No.	Description	Pack Size
0219875980	Ammonium acetate, 7.5 M solution	100 mL
0219785991	Ammonium acetate, 7.5 M Solution	1 L
0210100525		25 g
0210100580	Bicine	100 g
0210100583		250 g
0210103880	bis-Tris	100 g
0210103891	DIS-1115	1 kg
091810454	1X HBS without calcium, magnesium	500 mL
091810554	1X HBS without calcium, magnesium, phenol red	500 mL
0210192625		25 g
0210192650		50 g
0210192680		100 g
0210192683	HEPES, free acid	250 g
0210192690		500 g
0210192691		1 kg
0210192694		5 kg
0219483780	MOPS, free acid, molecular biology	100 g
0219483790	reagent	500 g
11RIST1370	10X PBD	500 mL
091861054	1X PBS, with magnesium chloride	500 mL
11PBS10X02	10X PBS	1 L
0219143101	Potassium phosphate dibasic, ACS reagent grade	1 kg
0219143001	Potassium phosphate monobasic, ACS reagent grade	1 kg
11SDS20002	10% SDS solution	1 L
0219486890	sodium citrate, ACS reagent grade	500 g
02191440.5	Sodium phosphate dibasic (Na- 2HPO4), ACS reagent grade	500 g
11RIST2050	20X SSC Buffer	500 mL
11SSC20X01	SSC Solution 20X	5 L
04821804	10X TAE Buffer	1 kit
11TAE50X01	50X TAE Buffer	1 L
11TBE10X03		5 L
04816721	10X TAE Buffer	1 L
04816724		4 L

#### **Cell Biology culture media**

Cat. No.	Description	Pack Size
0210026280		100 g
0210026283	Agar, NF grade,	250 g
0210026290	80-100 mesh	500 g
0210026291		1 kg

Agar is a polysaccharide complex extracted by bleaching and hot water treatment of agarocytes from the red alga Rhodophyceae, and usually consisting of the genera Gelidium, Acanthopeltis, Ceramium, Pterocladia and Gracilaria. The algae are typically found in the Pacific and Indian Oceans and in the Sea of Japan

#### **Antibiotics**

Cat. No.	Description	Pack Size
0219014805	Ampicillin Sodium Salt	5 g
0219014825	Ampicilin Socium Sait	25 g
0219452605	Ampicillin Sodium Salt,	5 g
	Cell Culture Reagent	
0215047750	Blasticidin S. Hydrochloride	50 mg
0219509205	Carbenicillin Disodium Salt	5 g
0215494691	Cefazolin Sodium Salt	1 g
0219032105	Chlaramahaniaal	5 g
0219032125	Chloramphenicol	25 g
0215284505	Chymostatin	5 mg
0219116880	Clindamycin Hydrochloride	100 mg
0219415791	Colistin Sulfate Salt	1 g
0219504405	Deve established by the ship of the	5 g
0219504410	Doxycycline Hydrochloride	10 g
0215507001	Ionomycin Calcium Salt	1 mg
0215961101	Ionomycin FreeAcid	1 mg
0215002905	Kananyain Managulfata	5 g
0215002925	Kanamycin Monosulfate	25 g
0215894805	Lincomycin Hydorchloride	5 g
0219453202	Mitomycin C,	2 mg
	Cell Culture Reagent	
0215626810	Piperacillin sodium Salt	10 g
0219554001	Vancomycin Hydrochloride	1 g





## cleaning/sanitizers

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#### 7X<sup>™</sup> Ready-to-Use Formulation



## Cleaning labware has never been so easy!

Researchers have trusted 7X<sup>™</sup> Detergents to clean labware for years.

Now 7X<sup>™</sup> is ready to use right from the bottle — just pump and go!

Available in a 1-gallon bottle with hand pump dispenser.

Cat. No.	Description	Pack Size
097668093	7X Ready To Use	1 gal
097667493	7X O-Matic	1 gal
097667593	ES 7X O-Matic	1 gal
097667193	ES 7X Liquid Concentrate	1 gal
097667093	7X Concentrate	1 gal

Find more information at mpbio.com/7X

#### **Surface Cleaners**

**DNA-Erase™:** A cleaning solution for removing DNA contamination and eliminating PCR artifacts from all laboratory surfaces, including benchtops, apparatus and pipettors.

#### RNase ERASE™:

A novel RNase decontamination solution. Completely removes RNase contamination from glass and plastic surfaces, pipettes, and equipments that must be RNase-free.



Cat. No.	Description	Pack Size
04821805	DNA-Erase™	500 mL
04821682	RNase ERASE™	250 mL

#### Water, DNase, RNase-FREE

## Designed for critical applications where DNase and RNase contamination can be serious problems!

Deionized water treated with 0.001% diethylpyrocarbonate (DEPC). Filtered through 0.2 micron filter and autoclaved to yield a sterile solution completely free of detectable DNase (both exo and endo) and RNase.

Cat. No.	Description	Pack Size
04821739	Water, DNase, RNase-FREE	500 mL





#### **SafTest Analyzer System**

Rapid evaluation of fat quality; Consistent, reliable results; Versatile and easy to use

The SafTest Touch-screen based protocols with ready-to-use kits makes determination of:

- Peroxide Value
- Free Fatty Acids
- Malonaldehyde
- Alkenal
- Percent Fat

The SafTest platform is a complete turn-key system for all of your food quality testing needs. Furthermore, the SafTest is the only analytical platform which uses non-toxic or unfriendly organic solvents in conjunction with its ability to perform a wide variety of food quality tests.



Cat. No.	Description
07SI2020	Solid Sample Instrumentation Platform for Peroxide and Alkenal
07SI2000	Solid Sample Instrumentation Platform for Free Fatty Acid, Malonaldehyde, Percent Fat, and Total Glycerin
07SC2000	Solid Sample Consumables Platform for all kits
07LI2020	Liquid Sample Instrumentation Platform for Peroxide and Alkenal
07LI2000	Liquid Sample Instrumentation Platform for Free Fatty Acid, Malonaldehyde, Percent Fat and Total Glycerin
07LC2000	Liquid Sample Consumables Platform for all Kits

#### **SafTest Kits**

#### MP SafTest Kits offer distinct advantages for quality testing, including:

- Quick results, typically 10-30 minutes, compared to traditional methods
- Kits include all reagents, calibrators, and controls required for 110-120 tests



Cat. No.	Description	Pack Size
NC1185400	Peroxide Test Kit	100 preps
Awaiting CAT No.	Free Fatty Acid Test Kit	100 preps
Awaiting CAT No	Malonaldehyde Test Kit	100 preps
Awaiting CAT No.	Alkenal Test Kit	100 preps
Awaiting CAT No.	Percent Fat Test Kit	100 preps
Awaiting CAT No.	Total Glycerin Test Kit	100 preps



## research diets

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#### **Customized Animal Research Diets Delivered Fresh to Your Lab!**

MP Biomedicals has over five decades of experience in customized animal research diets and more than 15,000 successful custom formulations. We specializes in mineral and vitamin deficient diets. Upon request, we can easily change any combination of components in our existing diets or design a custom diet to your exact specifications. Each diet is produced specifically to your order.

The package size as well as the content of prepared diets is designed to meet the researchers' needs. Formulas are available in sizes as small as 1 kg to as large as several tons.

To ensure freshness, all diets are formulated upon receipt of order—no diets are kept in stock so they are always fresh. Diet pellets are available in a choice of three sizes and can be colored-coded to ease control of administration. In addition, MP is geared for quick turn around. For example, made-to-order standard diets are typically shipped within 7 days. It is our primary goal to assure that your diet arrives fresh: when you need it.

Cat. No.	Vitamin Mixes
02905454	AIN 76 Vitamin Mix
02960098	AIN 76A Vitamin Mix
02960402	AIN 93 Vitamin Mix
02904654	Vitamin Diet Fortification Mix
02903244	Vanderzant Vitamin Mix

02903244	Vanderzant Vitamin Mix	
Cat. No.	Common Formulations	
02900454	Alphacel Hydrolyzed	
02900453	Alphacel Non Nutritive Bulk	
02903312	Brewers Yeast	
02960128	Casein Low Trace Element	
02901293	Casein Purified High Nitrogen	
02904520	Casein Vitamin Free	
02905417	Cocoa Butter	
02901403	Coconut Oil	
02901404	Coconut Oil Hydrogenated	
02901405	Cod Liver Oil	
02901411	Corn Ground Yellow	
02901414	Corn Oil	
02901415	Corn Oil Tocopherol Stripped	
02901419	Cottonseed Oil	
02190955	DL Methionine	
02901520	Dextrin White	
02960429	Dextrinized Corn Starch	
02901521	D-(+)- Dextrose Anhydrous	
02905594	Dextrose Monohydrate	

Cat. No.	Common Formulations
02901633	Egg white Spray Dried
02902140	Lard
02902141	Lard Tocopherol Stripped
02900396	Liver Powder
02960120	Menhaden Oil
02902363	Milk Powder Whole
02902887	Milk Powder skim
02904684	Peanut Oil
02960024	Soybean meal Defatted
02104687	Soybean Oil
02902940	Soybean Protein
02905456	Soy Protein Isolated
02902956	Starch Corn
02904713	Sucrose
02903085	Torula Yeast
02903288	Wheat Germ
02103287	Wheat Germ Oil
02101815	Wheat Gluten

Cat. No.	Mineral Mixes
02960400	AIN 93G Mineral Mix
02902844	Salt Mix Phillips and Hart
02960401	AIN 93M Mineral Mix
02902842	Salt Mix Rogers and Harper
02905455	AIN 76 Mineral Mix
02902845	Salt Mix #2 USP XIII

Cat. No.	Mineral Mixes	
02902843	Bernhart Tomarelli Salt Mix	
02902850	Salt Mix USP XIV	
02902834	Salt Mixture Briggs	
02960352	Sodium Free Salt Mix for Rat Modified	
02960285	Guinea Pig Mineral Mix	
02902851	Salt Mix W	
02902840	Salt Mix Hegsted	
02902837	Salt mix Williams-Briggs	
02902838	Salt Mix HMW	
02960264	Trace Minerals for an Ultra- clean Environment	
02902110	Jones and Foster Salt Mix	





#### **Environmentally Safe Liquid Scintillation Cocktails!**

MP Biomedicals delivers a complete line of Environmentally Safe\* LS cocktails formulated for specific applications and maximum performance. Whether the requirements call for a general purpose cocktail or a large volume cocktail, MP offers a non-hazardous, non-toxic, ready-to-use formulation custom tailored to your needs.



- Biodegradeable
- Non-Toxic
- Non-Harzardous
- One-Step, Ready-To-Use

\*MP Biomedicals liquid scintillation cocktails are environmentally safe in accordance with EPA regulations (Resources Conservation and Recovery Act, Title 40, CFR 260-263)

Cat. No.	Quantity
88245301	1 gal
88245304	4 x 1 gal
88245305	5 gal

#### CytoScint™ ES

The highest tritium performance and one-step counting of filters, TLC scrapings and other solubilized samples without pretreatment, CytoScint™ is the ideal choice. It is also excellent for small volume aqueous samples, and it requires no waiting on chemiluminecence.

Cat. No.	Quantity
88002001	1 gal
88002004	4 x 1 gal
88002005	5 gal

#### BetaMax™ ES

This formulation provides maximum efficiency of beta particle counting for non-aqueous samples, samples dried on solid supports and organic samples extracted from aqueous mixtures.

Cat. No.	Quantity
88247001	1 gal
88247004	4 x 1 gal
88247005	5 gal

#### EcoLume™

EcoLume™ provides maximum efficiency for large aqueous and organic volume samples including deionized water, PBS, HCl, urine and many others. It will not gel or phrase with the addition of sample to maximum load capacity, even when it exceeds 30% by volume.

Cat. No.	Quantity
88248001	1 gal
88248004	4 x 1 gal
88248005	5 gal

#### UniverSol™ ES

This LSC provides maximum efficiency of the "gelling" variety. As a traditional "dual phase" cocktail, UniverSol™ ES is formulated to work over a wide variety of requirements, and when diluted with water, allows concentrated solutions which normally precipitate to be counted as clear homogenous solutions.

Cat. No.	Quantity
88247501	1 gal
88247504	4 x 1 gal
88247505	5 gal

#### EcoLite (+)™

An all-purpose LSC with exceptional water and salt holding characteristics for virtually all aqueous and non-aqueous samples, EcoLite(+)™ is particularly useful for HPLC fractions, urea, phosphate buffers, protein digests, urine, difficult RIA samples and many other procedures where maximum solubilization and a stable counting solution are critical.



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