BIOCHEMICALS for Cell Culture

Commonly used reagents in animal, plant and insect cell culture.

194602 0°C — **ACETYLCHOLINE CHLORIDE** — 25 g, 100 g
[60-31-1]
(Acecoline)
Cell Culture Reagent
Crystalline
Purity: ~99%
$C_7H_{16}NO_2Cl$ MW 181.7

194603 0-5°C — **N-ACETYL-L-CYSTEINE** — 5 g, 10 g, 25 g, 50 g, 100 g, 500 g
[616-91-1]
Cell Culture Reagent
Crystalline
Purity: >96%
A mucolytic agent for isolation of mycobacteria from sputum.
$C_5H_9NO_3S$ MW 163.2

159030 -20°C — **N-ACETYL-S-FARNESYL-L-CYSTEINE** — 5 mg, 25 mg
(AFC)
Purity: 98%
Specific inhibitor of S-farnesyl-cysteinemethyl transferase. Also prevents carboxyl methylation of $p21^{ras}$ platelet RAP 1 and the transduction γ subunit.
Ref.: 1. Volker, C., et.al., J. Biol. Chem., **266**, 21515 (1991). 2. Huzoor-Akabar, et.al., ibid., **266**, 4387 (1991). 3. Perez-Sala, D., et.al., Proc. Natl. Acad. Sci. USA, **88**, 3043 (1991).
MW 367.5

159845 -20°C — **N-ACETYL-S-GERANYLGERANYL-L-CYSTEINE** — 5 mg, 10 mg
[139332-94-8]
(AGGC)
Purity: 98%
Specifically inhibits methyl esterification of geranylgeranylated proteins. Also, it blocks signal transduction in human neutrophils that are receptor mediated.
Ref.: 1. Phillips, M.R., et al., *Science*, **259**, 977 (1993). 2. Volker, C., et al., *FEBS Lett.*, **295**, 189 (1991).
MW 435.7

194604 0-5°C — **N-ACETYL-D-GLUCOSAMINE** — 5 g, 25 g, 100 g
[7512-17-6]
(2-Acetamido-2-deoxy-D-glucose)
Cell Culture Reagent
Crystalline
$C_8H_{15}NO_6$ MW 221.2

158221 -20°C — **N-ACETYL-D-GLUCOSAMINYL-β-(1→4)-N-ACETYLMURAMYL-L-ALANYL-D-ISOGLUTAMINE** — 1 mg, 5 mg
(GMDP)
Purity: 98%
Lyophilized
A novel synthetic analog of bacterial cell wall glycopeptide which acts as a modulator of humoral and cellular immunity reactions. Possesses immunoadjuvant and protective activity against bacterial and viral (including tumorigenic) infections. Differs from well-known muramyl peptides in that it contains GlcNAC attached to muramic acid via the β-(1→4) glycosidic bond.
Soluble in H_2O, EtOH, MeOH, DMF, and physiological saline (1g/ml)
Ref.: 1. Campbell, M.J., et al., J. Immunology, **145**, 1029 (1990). 2. Balitsky, K.P., et al., Int. J. Immunopharmacol., **11**, 429 (1989).

194605 0-5°C — **N-ACETYLNEURAMINIC ACID** — 10 mg, 25 mg, 100 mg, 250 mg, 500 mg, 1 g
[131-48-6]
(Sialic Acid; NANA; Type IV)
Cell Culture Reagent
From *E. coli*
White crystalline powder
Purity: ≥98%
$C_{11}H_{19}NO_9$ MW 309.3

158923 -20°C — **N-ACETYL-D-SPHINGOSINE** — 1 mg, 5 mg
[3102-57-6]
(C_2 Ceramide; N-Ethanoyl-D-sphingosine; Acetyl ceramide)
Purity: 98%
Inhibitor of cell proliferation and inducer of monocytic differentiation of HL-60 cells. Stimulates cytosolic serine/threonine protein phosphatase in T9 cells at low concentrations.
Ref.: 1. Kim, M.-Y., et.al., J. Biol. Chem., **266**, 484 (1991). 2. Okazaki, T., et.al., ibid., **265**, 15823 (1990). 3. Dobrowsky, R.T. and Hannun, Y.A., et.al., J. Biol. Chem., **267**, 5048 (1992).
$C_{20}H_{39}NO_3$ MW 341.5

194606 RT — **ADENINE** — 1 g, 5 g, 25 g, 100 g
[73-24-5]
(6-Aminopurine)
Free Base
Cell Culture Reagent
Purity: 99%
Viral research reagent and blood perservative.
$C_5H_5N_5$ MW 135.1

194608 RT — **ADENINE** — 1 g, 5 g, 25 g, 100 g
[6055-72-7]
(6-Aminopurine HCl)
Cell Culture Reagent
Hydrochloride
$C_5H_5N_5 \bullet HCl$ MW 171.6

194607 RT — **ADENINE SULFATE** — 5 g, 25 g, 100 g, 500 g
[6509-19-9]
Cell Culture Reagent
Purity: 99%
Hemisulfate
Dihydrate
$(C_5H_5N_5)_2 \bullet 1/2H_2SO_4 \bullet H_2O$
MW 404.4

100070 0-5°C — **ADENINE-9-β-D-ARABINOFURANOSIDE** — 100 mg, 500 mg, 1 g, 5 g, 10 g
[5536-17-4]
(Ara-A; Arabinosyl-adenine; Vidarabine)
Crystalline
Reported to possess antiviral activity[1] and useful for metabolism studies[2]
Ref.: 1. de Rudder, Privat de Garilhe, Antimicrob. Ag. Chemother., 578 (1965). 2. Cancer Res., **24**, 1042 (1964).
$C_{10}H_{13}N_5O_4$ MW 267.2

194609 0°C — **ADENOSINE** — 1 g, 5 g, 25 g, 100 g
[58-61-7]
(9-β-D-Ribofuranosyladenine)
Free Base
Cell Culture Reagent
$C_{10}H_{13}N_5O_4$ MW 267.2

194611 0°C — **ADENOSINE-5′-MONOPHOSPHATE** — 500 mg, 1 g, 10 g, 25 g
[4578-31-8]
From Equine Muscle
Cell Culture Reagent
Disodium Salt
Crystalline
Purity: 99-100%
$C_{10}H_{12}N_5Na_2O_7P$ MW 391.2

194613 0°C — **ADENOSINE-5′-TRIPHOSPHATE** — 1 g, 5 g, 10 g
[51963-61-2]
(ATP)
Disodium Salt
Cell Culture Reagent
Crystalline
Purity: ~99%
$C_{10}H_{14}N_5Na_2O_{13}P_3$ MW 551.2

100252 RT — **ADONITOL** — 5 g, 25 g, 100 g
[488-81-3]
(Ribitol)
Crystalline
$C_5H_{12}O_5$ MW 152.1

194615 RT — **AGAR** — 100 g, 250 g, 500 g, 1 kg, 5 kg
[9002-18-0]
Cell Culture Reagent
Powder
80-100 mesh

AGAROSE
[9012-36-6]
Low Gel Temperature
Electroendosmosis: 0.1
Gel Strength 1.5% solution: ≥550 gm/cm^2
Gel Temperature (1%): <30°C
A 1% solution remains fluid at 37°C for up to 24 hours. Will set to a firm gel at <25°C, and not remelt until temperatures exceed 65°C. This ability to remain in solution at 30-37°C allows a second digest on a restriction enzyme fragment without need to recover it from the gel. Agarose LGT is also preferred for studies of cellular antibody production and the Jerne Plaque assay of immune responses. Also used in agarose droplet macrophage inhibitory factor (MIF) assay.
800257 — 25 g
800259 — 100 g

194616 RT — **DL-α-ALANINE** — 100 g, 500 g, 1 kg
[302-72-7]
Cell Culture Reagent
Crystalline
$C_3H_7NO_2$ MW 89.1

100287 RT — **L-ALANINE** — 25 g, 100 g, 500 g, 1 kg, 5 kg
[56-41-7]
(2-Aminopropionic acid)
Crystalline
Purity: 99%
$C_3H_7NO_2$ MW 89.1

194618 RT — **β-ALANINE** — 100 g, 500 g
[107-95-9]
(3-Aminopropionic acid)
Cell Culture Reagent
Crystalline
$C_3H_7NO_2$ MW 89.1

191402 RT — **ALUMINUM POTASSIUM SULFATE, ACS** — 100 g, 500 g, 1 kg
[7784-24-9]
ACS Reagent grade
Assay: 98.0-102.0%
Crystalline
Dodecahydrate
$AlK(SO_4)_2 \bullet 12H_2O$ MW 474.4

194120 0-5°C — **ALBUMIN, BOVINE** — 25 mg, 100 mg, 250 mg
[9048-46-8]
Nuclease-Free
Purity: ≥90%
Contains no detectable exonuclease, endonuclease, ribonuclease, or protease activity. Some degradation products may exist.
Supplied as an aqueous solution in 50% glycerol at a concentration of 50 mg/ml at neutral pH.

105033 0-5°C — **ALBUMIN, BOVINE** — 10 g, 25 g, 100 g, 500 g
[9048-46-8]
Clinical Reagent Grade
RIA Grade
Purity: 98-99%
A fatty acid free bovine albumin powder designed for the most sensitive research and diagnostic applications. Manufactured by a process specifically designed to give consistently low levels of residual metabolites and enzymes. Especially suitable for RIA and enzyme kits as a protein base.
Insulin RIA: <1 micro unit/gm
T_3 and T_4 at or below detectable levels
pH: 7.0 ±0.2
Sulfated Ash: <2%
Moisture: <5%

194771 0-5°C — **ALBUMIN, BOVINE** — 5 g, 10 g, 50 g, 100 g, 500 g
[9048-46-8]
From Bovine Plasma
Cell Culture Reagent
Purity: 96-99%
Prepared fresh by the Cohn cold ethanol fractionation method followed by crystallization at low temperature from an alcohol containing solution. The material is not heated at any stage in the process. It can be utilized as a nutrient for tissue culture, for preparation of protein standards, and as an antigen in immunological studies in sensitive research applications.
pH 1% solution: 5.2 ±0.2
Sulfated Ash: <0.5%
Carbohydrates: <0.1%
Moisture: <5.2%

194773 0-5°C — **ALBUMIN, BOVINE** — 5 g
[9048-46-8]
Cell Culture Reagent
γ-Irradiated
Crystalline
Purity: 98-99%
Essentially globulin-free

194774 0-5°C — **ALBUMIN, BOVINE** — 250 mg, 1 g, 5 g, 10 g
[9048-46-8]
Cell Culture Reagent
Lyophilized
Essentially globulin-free

194775 0-5°C — **ALBUMIN, BOVINE** — 1 g, 5 g, 25 g, 100 g
[9048-46-8]
Cell Culture Reagent
Powder
Low Endotoxin
Less than 0.1 ng/mg detectable endotoxin.

194776 0-5°C — **ALBUMIN, BOVINE** — 1 g, 5 g, 25 g
[9048-46-8]
Cell Culture Reagent
Low endotoxin
Powder
Prepared using a salt fractionation procedure with ion exchange chromatography.
Less than 0.1 ng/mg endotoxin dectectable.

194772 0-5°C — **ALBUMIN, BOVINE** — 1 g, 5 g
[9048-46-8]
Fraction V
Cell Culture Reagent
Fatty Acid Free
Low endotoxin
Fatty acids content: <0.05 mg/gm protein (0.005%).

810101 0-5°C — **ALBUMIN, BOVINE** — 50 ml
PATH-O-CYTE® 4 SOLUTION
Albumin Solution
It can be used as a medium in density gradient centrifugation or as an addition to tissue culture growth medium.
Stable for at least 2 years at 5°C.

810111 0-5°C — **ALBUMIN, BOVINE,** — 50 ml
PATH-O-CYTE® 5 SOLUTION
Albumin Solution
It can be used as a medium in density gradient centrifugation or as an addition to tissue culture growth medium.
Stable at least 2 years at 5°C.

194619 RT — **p-AMINOBENZOIC ACID** — 1 g, 5 g, 25 g, 100 g
[150-13-0]
(PABA)
Free Acid
Cell Culture Reagent
White crystalline powder
Purity: 99+%
$C_7H_7NO_2$ MW 137.1

194620 RT — **L-α-AMINO-n-BUTYRIC ACID** — 250 mg, 1 g, 5 g
[1492-24-6]
Cell Culture Reagent
Crystalline
$C_4H_9NO_2$ MW 103.1

194621 0°C
δ-AMINOLEVULINIC ACID — 25 mg, 100 mg, 500 mg, 1 g
[5451-09-2]
(5-Aminolevulinic acid)
Hydrochloride
Cell Culture Reagent
Purity: Approx. 98%
$C_5H_9NO_3 \bullet HCl$ MW 167.6

194622 0-5°C
AMINOPTERIN — 10 mg, 25 mg, 100 mg
[54-62-6]
(4-Aminofolic acid; 4-Aminopteroyl-glutamic acid)
Cell Culture Reagent
Purity: ~98%
$C_{19}H_{20}N_8O_5$ MW 440.4

194623 RT
AMMONIUM CHLORIDE — 100 g, 500 g, 1 kg
[12125-02-9]
Cell Culture Reagent
Crystalline
NH_4Cl MW 53.5

194624 RT
AMMONIUM METAVANADATE — 100 g, 500 g
[7803-55-6]
Cell Culture Reagent
White to light yellow powder.
NH_4VO_3 MW 117

194625 0°C
ARACHIDONIC ACID — 10 mg, 50 mg, 100 mg, 500 mg
[506-32-1]
Cell Culture Reagent
Purity: 99%
Clear, colorless liquid which may develop a yellowish cast.
$C_{20}H_{32}O_2$ MW 304.5

194626 RT
L-ARGININE — 25 g, 100 g, 500 g
[74-79-3]
Cell Culture Reagent
Free Base
Purity: 99%
$C_6H_{14}N_4O_2$ MW 174.2

194627 RT
L-ARGININE — 25 g, 100 g, 500 g, 1 kg
[1119-34-2]
Hydrochloride
Cell Culture Reagent
Crystalline
$C_6H_{14}N_4O_2 \bullet HCl$ MW 210.7

194586 RT
L-ASCORBIC ACID — 100 mg
[50-81-7]
(Vitamin C)
Cell Culture Reagent
γ-Irradiated
Crystalline
Approx. 325 mesh
$C_6H_8O_6$ MW 176.1

194629 RT
L-ASCORBIC ACID — 100 g, 500 g, 1 kg
[134-03-2]
Sodium Salt
Cell Culture Reagent
Purity: 99%
$C_6H_7O_6Na$ MW 198.1

194630 RT
L-ASPARAGINE — 25 g, 100 g, 500 g
[70-47-3]
Cell Culture Reagent
Anhydrous
Crystalline
Purity: 99%
$C_4H_8N_2O_3$ MW 132.1

194631 RT
L-ASPARAGINE — 25 g, 100 g, 500 g, 1 kg
[5794-13-8]
Cell Culture Reagent
Monohydrate
Crystalline
Purity: 99+%
$C_4H_8N_2O_3 \bullet H_2O$ MW 150.1

194632 RT
DL-ASPARTIC ACID — 100 g
[617-45-8]
Cell Culture Reagent
Crystalline
Purity: 99+%
$C_4H_7NO_4$ MW 133.1

194633 RT
L-ASPARTIC ACID — 100 g, 500 g, 1 kg, 5 kg
[56-84-8]
Cell Culture Reagent
Crystalline
Purity: 99+%
$C_4H_7NO_4$ MW 133.1

159838 0-5°C
ATROPORIN — 10 µg, 50 µg
From *Crotalus atrox*
(Western Diamondback Rattlesnake)
Purified by SDS-PAGE, giving one band
Atroporin is an anti-cancer protein. Has been shown to kill various types of cancer cells in vitro (10^5 cells in culture) with a concentration of only 0.5 µg Atroporin, but has no effect on normal mouse kidney, spleen and liver cells in concentrations as high as 5 µg. Prevents, and causes regression of ascitic tumors formed by mouse myeloma cells. Shows enhanced cytolytic activity when used in combination with Kaotree.
MW ~35 kDa

194634 0-5°C
D-BIOTIN — 500 mg, 1 g, 5 g
[22879-79-4]
(Vitamin H)
Cell Culture Reagent
Crystalline
Ref.: Knappe, J., (1970), Annu. Review, Biochem., **39**, 757-76; Bayer, E. and Uilchek, M., (1974), Methods Enzymol., **34**, 265-7.
$C_{10}H_{16}N_2O_3S$ MW 244.3

100383 0-5°C
CALCIFEROL, U.S.P. — 1 g, 5 g, 25 g
[50-14-6]
Crystalline
Ergocalciferol: Vitamin D_2
Protect from light and air
40 units Vitamin D/µg
$C_{28}H_{44}O$ MW 396.7

101196 0-5°C
CALCIFEROL, U.S.P. — 1 g, 5 g, 25 g
[50-14-6]
Irradiated Ergosterol, Vitamin D_2
Adjusted to yield 850,000 I.U./g
$C_{28}H_{44}O$ MW 396.7

191413 RT
CALCIUM CARBONATE, ACS — 100 g, 500 g, 1 kg
[471-34-1]
ACS Reagent Grade
Purity: >99%
Crystalline
$CaCO_3$ MW 100.1

194635 RT
CALCIUM CHLORIDE — 500 g, 1 kg, 5 kg
[10035-04-8]
Cell Culture Reagent
Dihydrate
Purity: ~99%
$CaCl_2 \bullet 2H_2O$ MW 147

193800 RT
CALCIUM NITRATE — 100 g, 500 g, 1 kg
ULTRA PURE
[13477-34-4]
Ultra Pure Reagent
Tetrahydrate
Purity: ≥98%
$Ca(NO_3)_2 \bullet 4H_2O$ MW 236.2

193806 RT — **CALCIUM PHOSPHATE** — 25 g, 100 g, 500 g
[12167-74-7]
Tribasic
Cell Culture Reagent
$Ca_5HO_{13}P_3$ MW 502.3

904520 RT — **CASEIN** — 1 lb, 5 lb, 25 lb, 100 lb
[68308-23-6]
Vitamin Free
From New Zealand Lactic Acid
Precipitated casein, extracted with ethyl alcohol

904798 RT — **CASEIN** — 1 lb, 5 lb, 25 lb
[68308-23-6]
Vitamin Free
Micropulverized

194636 RT — **CHOLESTEROL** — 1 g, 5 g, 25 g, 100 g
[57-88-5]
Cell Culture Reagent
Purity: ≥99%
$C_{27}H_{46}O$ MW 386.7

194637 RT — **CHOLIC ACID** — 10 g, 25 g, 100 g, 500 g
[361-09-1]
(Cholalic acid; 3α,7α, 12α-Trihydroxycholan-24-oic acid)
Sodium Salt
Cell Culture Reagent
Biochemical solubilizing agent
$C_{24}H_{39}O_5Na$ MW 430.6

194638 RT — **CHOLINE BITARTRATE** — 25 g, 100 g
[87-67-2]
Cell Culture Reagent
Purity: 98+%
Crystalline
$C_5H_{14}NO \bullet C_4H_5O_6$ MW 253.3

194639 RT — **CHOLINE CHLORIDE** — 100 g, 500 g, 1 kg
[67-48-1]
Cell Culture Reagent
Purity: 99%
$C_5H_{14}NOCl$ MW 139.6

194640 0-5°C — **CHOLINE DIHYDROGEN CITRATE** — 100 g, 500 g, 1 kg
[77-91-8]
Cell Culture Reagent
Crystalline
Purity: 99%
$C_5H_{14}NO \bullet C_6H_7O_7$ MW 295.3

194641 RT — **CITRIC ACID** — 100 g, 500 g, 1 kg
[77-92-9]
Cell Culture Reagent
Anhydrous
Crystalline
$C_6H_8O_7$ MW 192.1

102900 RT — **CITRIC ACID** — 100 g, 500 g, 1 kg, 5 kg
[68-04-2]
(Sodium citrate)
Trisodium Salt
Crystalline
Dihydrate
$C_6H_5O_7Na_3 \bullet 2H_2O$ MW 294.1

194642 RT — **COBALT CHLORIDE** — 25 g, 100 g, 250 g
[7791-13-1]
Cell Culture Reagent
Hexahydrate
$CoCl_2 \bullet 6H_2O$ MW 237.9

Cocarboxylase *See:* **Thiamine Pyrophosphate Chloride**

100493 0°C — **COENZYME A** — 10 mg, 25 mg, 50 mg, 100 mg, 250 mg, 500 mg, 1 g
[18439-24-2]
Trilithium salt
Dihydrate
Chromatographically homogenous
Total CoA: 96+%
$C_{21}H_{33}Li_3N_7O_{16}P_3S \bullet 2H_2O$ MW 821.3

194981 -20°C — **CONALBUMIN** — 50 mg, 250 mg
[1391-06-6]
(Ovotransferrin)
From Chicken Egg
Binding protein which can transport metal ions such as Cu^{2+}, Fe^{2+}, Mn^{2+}, and Zn^{2+}.
Purity: >95%
Ref.: Szekacs, A., et al., Anal. Biochem., **207**, 291 (1992).
MW 76 kDa

194644 RT — **CUPRIC CHLORIDE** — 100 g, 500 g, 1 kg
[10125-13-0]
Dihydrate
Cell Culture Reagent
$CuCl_2 \bullet 2H_2O$ MW 170.5

194645 RT — **CUPRIC SULFATE** — 250 g, 500 g, 1 kg
[7758-99-8]
Cell Culture Reagent
Pentahydrate
Crystalline
Purity: ≥99%
$CuSO_4 \bullet 5H_2O$ MW 249.68

190052 RT — **α-CYCLODEXTRIN** — 250 mg, 1 g, 5 g, 25 g
[10016-20-3]
(Schardinger α-Dextrin)
Reported useful for the selective precipitation of enantiomeric, positional or structural isomers.
Ref.: (1) Applications of cyclodextrins in chromatographic separations and purification methods. Hinze, W., Separation and purification methods, 1981, **10(2)**, 159-237; (2) Chromatographic Science Series, Vol. 17: Thin Layer Chromatography: Techniques and applications. Fred, B.: Sherma, J. (Marcel Decker, Inc.; New York, NY) 1982, 256.
$C_{36}H_{60}O_{30}$ MW 972.9

190053 RT — **β-CYCLODEXTRIN** — 1 g, 5 g, 25 g, 100 g
[7585-39-9]
(Schardinger β-Dextrin)
Crystalline
Reported useful for the selective precipitation of enantiomeric, positional or structural isomers.
Ref.: (1) Applications of cyclodextrins in chromatographic separations and purification methods. Hinze, W., Separation and purification methods 1981, **10(2)**, 159-237; (2) Chromatographic Science Series, Vol. 17: Thin Layer Chromatography: Techniques and applications. Fred, B.; Sherma, J. (Marcel Decker, Inc.: New York, NY) 1982, 256.
MW 1135.0

190054 RT — **γ-CYCLODEXTRIN** — 25 mg, 100 mg, 500 mg, 1 g, 5 g
[17465-86-0]
(Schardinger γ-Dextrin)
Crystalline
Reported to be useful as a fluorescent enhancer for chemical and clinical assays.
Ref.: (1) Applications of cyclodextrins in chromatographic separations and purification methods. Hinze, W., Separation and purification methods 1981, **10(2)**, 159-237;
(2) Chromatographic Science Series, Vol. 17: Thin Layer Chromatography: Techniques and Applications. Fred, B.; Sherma, J. (Marcel Decker, Inc.: New York, NY) 1982, 256.
MW 1297.1

194646 RT — **L-CYSTEINE** — 25 g, 100 g, 500 g, 1 kg
[52-90-4]
(β-Mercapto-L-alanine)
Free Base
Cell Culture Reagent
Crystalline
$C_3H_7NO_2S$ MW 121.2

194647 RT — **L-CYSTEINE** — 25 g, 100 g, 500 g
[52-89-1]
Cell Culture Reagent
Monohydrate
Hydrochloride
$C_3H_7NO_2S \bullet HCl \bullet H_2O$ MW 175.6

194648 0°C — **L-CYSTEINE ETHYL ESTER** — 5 g
[868-59-7]
Cell Culture Reagent
Hydrochloride
Purity: ~98%
$C_5H_{11}NO_2S \bullet HCl$ MW 185.7

194649 RT — **L-CYSTINE** — 25 g, 100 g, 500 g
[56-89-3]
Cell Culture Reagent
Purity: 99%
White crystals
$C_6H_{12}N_2O_4S_2$ MW 240.3

194650 RT — **L-CYSTINE** — 25 g, 100 g, 500 g
[30925-07-6]
Cell Culture Reagent
Dihydrochloride
$C_6H_{12}N_2O_4S_2 \bullet 2HCl$ MW 313.2

194651 RT — **CYTIDINE** — 1 g, 5 g, 50 g
[65-46-3]
(Cytosine-β-D-riboside)
Free Base
Cell Culture Reagent
$C_9H_{13}N_3O_5$ MW 243.2

150769 0°C — **CYTOCHALASIN A** — 1 mg
[14110-64-6]
From *Helminthosporium dematioideum*
Crystalline
Cytochalasins are fungal metabolites which exhibit interesting effects on cell activity. Important tools for cytological research.
$C_{29}H_{35}NO_5$ MW 477.6

195119 0°C — **CYTOCHALASIN B** — 1 mg, 5 mg, 10 mg
[14930-96-2]
From *Drechslera dematidea*
Crystalline
Interesting tool for cytological research.
$C_{29}H_{37}NO_5$ MW 479.6

150770 0°C — **CYTOCHALASIN C** — 1 mg
[22144-76-9]
From *Metarrhizium anisopliae*
Crystalline
$C_{30}H_{37}NO_6$ MW 507.6

150771 0°C — **CYTOCHALASIN D** — 1 mg, 5 mg
[22144-77-0]
From *Zygosporium mansonii*
Crystalline
$C_{30}H_{37}NO_6$ MW 507.6

150772 0°C — **CYTOCHALASIN E** — 1 mg, 5 mg
[36011-19-5]
From *Aspergillus clavatus*
Crystalline
$C_{28}H_{33}NO_7$ MW 495.6

194654 0°C — **2′-DEOXYADENOSINE** — 250 mg, 1 g, 5 g, 25 g
[958-09-8]
Cell Culture Reagent
White crystalline powder
Purity: 98-100%
$C_{10}H_{13}N_5O_3$ MW 251.2

194655 0°C — **2′-DEOXYCYTIDINE** — 100 mg, 250 mg, 1 g, 10 g
[3992-42-5]
Cell Culture Reagent
Hydrochloride
$C_9H_{13}N_3O_4 \bullet HCl$ MW 263.7

194656 0°C — **2′-DEOXYGUANOSINE** — 25 mg, 100 mg, 250 mg, 1 g
[961-07-9]
Cell Culture Reagent
Crystalline
Purity: 99-100%
$C_{10}H_{13}N_5O_4$ MW 267.2

194657 0-5°C — **2-DEOXY-D-RIBOSE** — 500 mg, 1 g
[533-67-5]
(D-*erythro*-2-Deoxypentose)
Cell Culture Reagent
Crystalline
$C_5H_{10}O_4$ MW 134.1

194658 RT — **ETHANOLAMINE** — 100 ml, 500 ml, 1 liter
[141-43-5]
Cell Culture Reagent
Free Base
Purity: ~95%
1 ml = approx. 1.02 g
C_2H_7NO MW 61.08

194659 RT — **ETHYLENEDIAMINETETRAACETIC ACID** — 100 g, 500 g
[60-00-4]
(EDTA)
Cell Culture Reagent
Free Acid
Purity: 99%
$C_{10}H_{16}N_2O_8$ MW 292.2

194660 RT — **ETHYLENEDIAMINETETRAACETIC ACID** — 100 g, 500 g, 1 kg
[67401-50-7]
(Versene; EDTA-Na_4)
Cell Culture Reagent
Purity: 99%
Tetrasodium Salt
$C_{10}H_{12}N_2O_8Na_4$ MW 380.2

194044 RT — **FERRIC AMMONIUM SULFATE, ACS** — 25 g, 100 g, 500 g
[7783-83-7]
(Ammonium ferric sulfate; Ammonium iron[III] sulfate)
Dodecahydrate
ACS Reagent Grade
Purity: ≥99%
$FeNH_4(SO_4)_2 \bullet 12H_2O$ MW 482.2

194661 RT — **FERRIC CITRATE** — 250 g, 1 kg
[3522-50-7]
(Iron[III]citrate)
Cell Culture Reagent
Crystalline
$C_6H_5O_7Fe$ MW 244.9

194662 RT — **FERRIC NITRATE** — 100 g, 500 g, 1 kg
[7782-61-8]
(Iron[III] nitrate)
Cell Culture Reagent
Nonahydrate
$Fe(NO_3)_3 \bullet 9H_2O$ MW 404

194663 RT — **FERROUS SULFATE** — 250 g, 500 g, 1 kg
[7782-63-0]
Cell Culture Reagent
Heptahydrate
Purity: >99%
$FeSO_4 \bullet 7H_2O$ MW 278

104874 0-5°C — **FETUIN I** — 100 mg, 250 mg, 1 g
[9014-81-7]
From Fetal Bovine Serum
A glycoprotein recovered from the globulin fraction of fresh calf serum by ammonium sulfate fractionation.
Ref.: Pederson, K.O., J. Phys. and Colloid Chem., **51**, 164 (1947).

152410 0-5°C — **FETUIN II** — 1 g
From Neonatal Calf Serum
A glycoprotein recovered from the globulin fraction of calf serum by ammonium sulfate fractionation.
Ref.: Pederson, K.O., J. Phys. and Colloid Chem., 51, 164 (1947)

160003 RT — **FICOLL®** — 5 g, 10 g, 25 g, 100 g
[26873-85-8]
A copolymer of sucrose and epichlorohydrin.
Component used to make density gradients for lymphocyte separation, including ICN LymphoSep™ & Mono-Poly™ Resolving Medium (see Cell Biology Section).
Ficoll® is a registered trademark of Pharmacia Inc.
MW ~400,000

194664 0°C — **FLAVIN ADENINE DINUCLEOTIDE** — 10 mg, 25 mg, 100 mg, 250 mg, 500 mg, 1 g
[146-14-5]
(FAD)
Cell Culture Reagent
Disodium Salt
Purity: 95-99%
The prosthetic group of certain oxidases
$C_{27}H_{31}N_9O_{15}P_2Na_2$ MW 829.6

151128 0°C — **FLAVIN MONONUCLEOTIDE** — 5 g, 10 g, 25 g
[130-40-5]
Monosodium Salt
Dihydrate
Practical Grade
Purity: 78-80%
Riboflavin Content: 2-3%
Our assays of some dealers product shows our material to be better than the commercial grade most others offer.
$C_{17}H_{20}N_4O_9PNa \bullet 2H_2O$ MW 514.4

194665 RT — **FOLIC ACID** — 5 g, 10 g, 25 g, 100 g
[59-30-3]
(Pteroylglutamic Acid)
Cell Culture Reagent
Crystalline
Purity: 98%
$C_{19}H_{19}N_7O_6$ MW 441.4

194666 RT — **FOLINIC ACID** — 25 mg, 100 mg, 500 mg
[1492-18-8]
(N^5-Formyl-5,6,7,8- tetrahydropteroyl-L-glutamic acid; Citrovorum factor; Leucovorin)
Cell Culture Reagent
Calcium Salt
Pentahydrate
$C_{20}H_{21}N_7O_7Ca$ MW 601.6

194667 RT — **β-D-(-)-FRUCTOSE** — 100 g, 500 g, 1 kg, 5 kg
[57-48-7]
(β-D-(-)-levulose)
Cell Culture Reagent
Purity: 99+%
$C_6H_{12}O_6$ MW 180.2

194668 RT — **FUMARIC ACID** — 100 g, 500 g, 1 kg
[110-17-8]
Cell Culture Reagent
Free Acid
Purity: 99%
$C_4H_4O_4$ MW 116.1

194669 RT — **D-(+)-GALACTOSAMINE** — 100 mg, 500 mg, 1 g, 5 g
[1772-03-8]
(Chondrosamine hydrochloride)
Cell Culture Reagent
Hydrochloride
Purity: 99%
$C_6H_{13}NO_5 \bullet HCl$ MW 215.6

194670 RT — **D-(+)-GALACTOSE** — 100 g, 500 g, 1 kg
[59-23-4]
Cell Culture Reagent
Anhydrous
Crystalline
Purity: 98%
$C_6H_{12}O_6$ MW 180.2

103604 0°C — **GANGLIOSIDES** — 10 mg, 25 mg, 100 mg
From Bovine Brain
Highly purified
May contain approx. 18-20% N-acetylneuraminic acid.

101780 RT — **D-GLUCONO-δ-LACTONE** — 100 g, 500 g, 1 kg
[90-80-2]
(D-Gluconic acid-D-lactone)
Purity: 99+%
Crystalline
$C_6H_{10}O_6$ MW 178.1

194671 RT — **D-(+)-GLUCOSAMINE** — 25 g, 100 g, 500 g
[66-84-2]
(2-Amino-2-deoxy-D-glucose; Chitosamine)
Cell Culture Reagent
Purity: 99%
Hydrochloride
$C_6H_{13}NO_5 \bullet HCl$ MW 215.6

194672 RT — **D-(+)-GLUCOSE** — 100 g, 1 kg, 5 kg
[50-99-7]
(Dextrose; Corn sugar)
Cell Culture Reagent
Anhydrous
Crystalline
$C_6H_{12}O_6$ MW 180.2

194673 0°C — **α-D-GLUCOSE-1-PHOSPHATE** — 25 mg, 50 mg, 100 mg, 500 mg, 1 g
[5996-14-5]
Cell Culture Reagent
Dihydrate
Dipotassium Salt
Purity: 98%
$C_6H_{11}O_9PK_2 \bullet 2H_2O$ MW 372.3

194674 RT — **GLUCURONOLACTONE** — 25 g, 100 g, 1 kg
[32499-92-6]
(D-Glucuronic acid lactone)
Cell Culture Reagent
Crystalline
$C_6H_8O_6$ MW 176.1

194675 RT — **DL-GLUTAMIC ACID** — 10 g, 25 g, 100 g, 1 kg
[617-65-2]
(DL-2-Aminopentanedioic acid)
Cell Culture Reagent
Monohydrate
Purity: 99+%
$C_5H_9NO_4 \bullet H_2O$ MW 165.1

194676 RT — **L-GLUTAMIC ACID** — 500 g, 1 kg, 5 kg
[56-86-0]
(L-2-Aminopentanedioic acid)
Free Acid
Cell Culture Reagent
Purity: 99-100%
Crystalline
$C_5H_9NO_4$ MW 147.1

194677 RT — **L-GLUTAMIC ACID** — 100 g, 500 g, 1 kg
[142-47-2]
(Monosodium glutamate)
Cell Culture Reagent
Purity: 99+%
Monosodium Salt
$C_5H_8NO_4Na$ MW 169.1

194678 RT — **L-GLUTAMINE** — 25 g, 100 g, 250 g, 500 g, 1 kg
[56-85-9]
(L-2-Aminoglutaramic acid)
Cell Culture Reagent
Crystalline
Purity: 99-100%
$C_5H_{10}N_2O_3$ MW 146.1

L-GLUTAMINE
200 mM solution
Shipped frozen in dry ice
1680146 — 20 ml
1680149 — 100 ml

L-GLUTAMINE
Powder
Storage temperature: 2-8°C
1580113 — 20 g
1580115 — 50 g

194679 0-5°C — **GLUTATHIONE REDUCED** — 5 g, 10 g, 25 g, 100 g
[70-18-8]
(γ-L-Glutamyl-L-cysteinylglycine)
Cell Culture Reagent
Crystalline
Purity: 98-100%
Useful tripeptide involved in many aspects of metabolism, including transport of γ-glutamyl amino acids and reductive cleavage of disulfide bonds.
$C_{10}H_{17}N_3O_6S$ MW 307.3

151193 0-5°C **GLUTATHIONE OXIDIZED** — 250 mg, 500 mg, 1 g, 5 g
[121-24-4]
Anhydrous
(γ-L-Glutamyl-L-cysteinylglycine)$_2$
Acts as hydrogen acceptor in enzymic determination of NADP and NADPH.
$C_{20}H_{32}N_6O_{12}S_2$ MW 612.6

194680 RT **GLYCEROL** — 100 ml, 500 ml
[56-81-5]
Cell Culture Reagent
Highly purified
Purity: 99+%
Ideal for use as a cryoprotectant.
$C_3H_8O_3$ MW 92.09

102914 RT **GLYCEROPHOSPHATE** — 25 g, 100 g, 500 g, 1 kg
Disodium Salt
Pentahydrate
Contains approx. 60% α-Glycerophosphate, sodium salt and 40% β-Glycerophosphate, sodium salt meets NF $\times$ specifications. White, fine crystalline, hygroscopic powder.
$C_3H_7O_6PNa_2 \bullet 5H_2O$ MW 306

195206 RT **β-GLYCEROPHOSPHATE** — 25 g, 50 g, 100 g, 500 g, 1 kg
[819-83-0]
Disodium Salt
Pentahydrate
L-α-isomer impurity 0.1% maximum. Suitable for the Bodansky phosphatase procedure.
$C_3H_7O_6PNa_2 \bullet 5H_2O$ MW 306.1

194681 RT **GLYCINE** — 100 g, 500 g, 1 kg, 5 kg
[56-40-6]
(Aminoacetic acid)
Cell Culture Reagent
Crystalline
Free Acid
$C_2H_5NO_2$ MW 75.1

194548 RT **GLYCYLGLYCINE** — 10 g, 25 g, 100 g, 1 kg
[556-50-3]
(GLYGLY)
Cell Culture Reagent
Crystalline
Free Base
pKa=8.2 at 25°C
Useful pH range 7.5-8.9
$C_4H_8N_2O_3$ MW 132.1

190691 RT **GUANINE** — 1 g, 5 g, 25 g, 100 g
[73-40-5]
(2-Amino-6-hydroxypurine)
Free Base
Highly Purified
White Crystals.
$C_5H_5N_5O$ MW 151.1

194682 RT **GUANOSINE** — 1 g, 5 g, 25 g
[118-00-3]
(9-[β-D-Ribofuranosyl] guanine)
Cell Culture Reagent
Crystalline
$C_{10}H_{13}N_5O_5$ MW 283.2

101924 0-5°C **HEMIN** — 250 mg, 1 g, 10 g, 25 g
[15489-47-1]
(Hemin Chloride)
Bovine
Crystalline
Purity: >98%
$C_{34}H_{32}ClFeN_4O_4$ MW 652

194683 0-5°C **HEPARIN** — 10 KU, 25 KU, 50 KU, 100 KU, 250 KU, 500 KU, 1000 KU
[9005-48-5]
Potassium Salt
Cell Culture Reagent
Based on 100 u/mg. Actual activity supplied with each shipment.
Moisture: 10%, Ash: 0.45%,
Na:<1%, K: 12%
Protein: Negative
Nitrogen: Approx. 2.2%
pH approx. 7

194115 RT **HEPARIN** — 10 mg, 50 mg, 100 mg, 250 mg
[9041-08-1]
From Porcine Intestinal Mucosa
Low Molecular Weight I
Lyophilized and produced by base-induced β-eliminative cleavage.
Avg. Mol. Wt.: ~3000
Sodium Salt
Activity: Anti-IIa <10 IU/mg.

194684 RT **L-HISTIDINE** — 100 g, 500 g, 1 kg
[71-00-1]
Cell Culture Reagent
Free Base
Purity: 99+%
$C_6H_9N_3O_2$ MW 155.2

194685 RT **L-HISTIDINE** — 5 g, 25 g, 100 g
[645-35-2]
Cell Culture Reagent
Hydrochloride
Monohydrate
Crystalline
$C_6H_9N_3O_2 \bullet HCl \bullet H_2O$ MW 209.6

194686 RT **4-HYDROXY-L-PROLINE** — 25 g, 100 g
[51-35-4]
(L-4-Hydroxy-2-pyrrolidine-carboxylic acid)
Cell Culture Reagent
Trans Isomer
Crystalline
$C_5H_9NO_3$ MW 131.1

153540 RT **HYDROXYPROPYL β-CYCLODEXTRIN** — 1 g, 5 g
[94035-02-6]
(HBC)

194687 RT **HYPOXANTHINE** — 1 g, 5 g, 25 g, 100 g
[68-94-0]
(6-Hydroxypurine)
Cell Culture Reagent
Anhydrous
Crystalline
Purity: 99+%
$C_5H_4N_4O$ MW 136.1

194688 RT **D-*myo*-INOSITOL** — 50 g, 100 g, 500 g, 1 kg
[87-89-8]
(i-Inositol; *myo*-Inositol; meso-Inositol)
Cell Culture Reagent
A lipotropic agent.
$C_6H_{12}O_6$ MW 180.2

102082 RT **DL-ISOLEUCINE** — 10 g, 25 g, 50 g, 100 g
[443-79-8]
Purity: 99+%
Crystalline
Essentially free of leucine.
$C_6H_{13}NO_2$ MW 131.2

194689 RT **L-ISOLEUCINE** — 1 g, 5 g, 10 g, 25 g, 100 g
[73-32-5]
Cell Culture Reagent
Purity: 99%
Crystalline
$C_6H_{13}NO_2$ MW 131.2

194690 0-5°C **α-KETOGLUTARIC ACID** — 1 g, 5 g, 25 g, 100 g, 500 g
[328-50-7]
(2-Oxopentanedioic acid)
Cell Culture Reagent
Free Acid
Purity: 98%
$C_5H_6O_5$ MW 146.1

102131 RT **LACTALBUMIN HYDROLYSATE ENZYMATIC** — 250 g, 500 g, 1 kg, 5 kg
(Edamin)
Total Nitrogen: 12.3%
Amino Nitrogen: 6.9%
Solubility (in H_2O at 25°C):
20 gm/liter

194691 0-5°C — **DL-LACTIC ACID** — 100 ml, 500 ml
[312-85-6]
Cell Culture Reagent
Sodium Salt
60% Solution by weight
$C_3H_5O_3Na$ MW 112.1

193898 0-5°C — **L(+)-LACTIC ACID** — 10 g
[103404-76-8]
Hemizinc Salt
Purity: ≥98%
$C_3H_5O_3 \bullet 1/2Zn$ MW 121.8

152533 RT — **D-LACTOSE, ACS** — 1 kg, 2 kg
[5989-81-1]
ACS Reagent Grade
Monohydrate
$C_{12}H_{22}O_{11} \bullet H_2O$ MW 360.3

194693 RT — **DL-LEUCINE** — 25 g, 100 g, 500 g
[328-39-2]
Cell Culture Reagent
Crystalline
Purity: 99+%
$C_6H_{13}NO_2$ MW 131.2

194694 RT — **L-LEUCINE** — 25 g, 100 g, 250 g
[61-90-5]
(L-2-Amino-4-methylpentanoic acid)
Cell Culture Reagent
Crystalline
Substantially free of isoleucine and methionine
$C_6H_{13}NO_2$ MW 131.2

194695 0°C — **LINOLEIC ACID** — 100 mg, 1 g, 5 g, 10 g, 25 g
[60-33-3]
Cell Culture Reagent
Free Acid
Purity: 95-99%
$C_{18}H_{32}O_2$ MW 280.4

960122 RT — **LINSEED OIL** — 1 lb, 5 lb
Raw

194696 0°C — **L-LYSINE** — 5 g, 25 g, 100 g
[56-87-1]
(L-2,6-Diaminohexanoic acid)
Cell Culture Reagent
Free Base
Crystalline
$C_6H_{14}N_2O_2$ MW 146.2

194697 RT — **L-LYSINE** — 100 g, 500 g, 1 kg
[657-27-2]
Cell Culture Reagent
Hydrochloride
Crystalline
Purity: 99+%
$C_6H_{14}N_2O_2 \bullet HCl$ MW 182.6

194698 RT — **MAGNESIUM CHLORIDE** — 100 g, 500 g, 1 kg
[7791-18-6]
Cell Culture Reagent
Hexahydrate
Crystalline
$MgCl_2 \bullet 6H_2O$ MW 203.3

194699 RT — **MAGNESIUM SULFATE** — 500 g, 1 kg
[7487-88-9]
Cell Culture Reagent
Anhydrous
Crystalline
$MgSO_4$ MW 120.4

158950 -20-0°C — **MAITOTOXIN** — 5 µg, 10 µg, 25 µg
[59392-53-9]
Purity: ≥95%
Activates L-type Ca^{2+} channels and stimulates phosphoinositide turnover isolated from marine dinoflagellates.
Ref.: 1. Choi, O.H., et.al., Mol. Pharmacol., **37**, 222 (1990). 2. Yokoyama, A., et.al., Biochem., **104**, 184 (1988). 3. Gusovsky, F. and Daly, J.W., Biochem. Pharmacol., **39**, 1633 (1990).
$C_{164}H_{256}O_{68}S_2Na_2$ MW 3422

194700 RT — **L-MALIC ACID** — 5 g, 25 g, 100 g, 500 g
[97-67-6]
(L-Hydroxysuccinic acid)
Cell Culture Reagent
Crystalline
Free Acid
Purity: 99%
$C_4H_6O_5$ MW 134.1

194701 RT — **D-(+)-MALTOSE** — 100 g, 500 g, 1 kg
[6363-53-7]
(4-O-α-D-Glucopyranosyl-D-glucose)
Cell Culture Reagent
Monohydrate
Crystalline
Purity: 99%
Mixed Anomers
$C_{12}H_{22}O_{11} \bullet H_2O$ MW 360.3

155334 RT — **MANGANESE CHLORIDE** — 100 g, 500 g
[13446-34-9]
Crystalline
Tetrahydrate
$MnCl_2 \bullet 4H_2O$ MW 197.9

194702 RT — **MANGANESE SULFATE** — 100 g, 500 g, 1 kg
[10034-96-5]
Cell Culture Reagent
Crystalline
$MnSO_4$ MW 151

194703 RT — **D-(+)-MANNOSE** — 25 g, 100 g, 500 g
[3458-28-4]
(Seminose)
Cell Culture Reagent
Purity: 99%
Crystalline
$C_6H_{12}O_6$ MW 180.2

102260 RT — **MENADIONE SODIUM BISULFITE U.S.P.** — 100 g, 500 g, 1 kg
[130-37-0]
Purity: 63-75%
Water soluble
$C_{11}H_8O_2 \bullet NaHSO_3$ MW 276.2

194705 RT — **2-MERCAPTOETHANOL** — 100 ml, 250 ml, 500 ml, 1 liter
[60-24-2]
(β-Mercaptoethanol; 2-Hydroxyethylmercaptan)
Cell Culture Reagent
Used to reduce disulfide linkages in solubilizing proteins for gel electrophoresis. Also reduces excess oxidative polymerization of catalysts.
1 ml = 1.12 g/ml
C_2H_6OS MW 78.13

194706 RT — **DL-METHIONINE** — 100 g, 500 g, 1 kg
[59-51-8]
(DL-2-Amino-4-methylthiobutanoic acid)
Cell Culture Reagent
Crystalline
Purity: 99+%
$C_5H_{11}NO_2S$ MW 149.2

194707 RT — **L-METHIONINE** — 25 g, 100 g, 500 g, 1 kg
[63-68-3]
(L-2-Amino-4-methylthiobutanoic acid)
Cell Culture Reagent
Crystalline
Purity: 99+%
$C_5H_{11}NO_2S$ MW 149.2

194708 0°C — **METHOTREXATE** — 10 mg, 25 mg, 100 mg, 500 mg
[59-05-2]
(Amethopterin)
Cell Culture Reagent
Crystalline
$C_{20}H_{22}N_8O_5$ MW 454.4

194709 RT — **METHYL CELLULOSE** — 100 g, 250 g
[9004-67-5]
Cell Culture Reagent
Viscosity of 2% aqueous solution at 25°C: **15 centipoises**

194710 RT — **MOLYBDIC ACID** — 100 g
[12027-67-7]
Ammonium Salt
Cell Culture Reagent
$(NH_4)_6Mo_7O_{24} \bullet 4H_2O$ MW 1235.9

194711 0-5°C — **α-MONOTHIOGLYCEROL** — 25 ml, 50 ml, 100 ml, 250 ml, 500 ml
[96-27-5]
(α-Thioglycerol; 3-Mercapto-1,2-propanediol)
Cell Culture Reagent
Purity: 98%
1 ml = approx. 1.25 g.
$C_3H_8O_2S$ MW 108.2

194712 RT — **NIACINAMIDE** — 100 g, 500 g, 1 kg
[98-92-0]
(Nicotinic acid amide; Nicotinamide; Pyridine-3-carboxylic acid amide)
Cell Culture Reagent
Purity: 98-100%
$C_6H_6N_2O$ MW 122.1

194713 RT — **NICKEL CHLORIDE** — 100 g, 500 g, 1 kg
[7791-20-0]
Cell Culture Reagent
Hexahydrate
Crystalline
$NiCl_2 \bullet 6H_2O$ MW 237.7

194714 0°C — **β-NICOTINAMIDE ADENINE DINUCLEOTIDE** — 100 mg, 250 mg, 500 mg, 1 g, 5 g, 10 g
[53-84-9]
(β-NAD)
Cell Culture Reagent
Oxidized Form
Free Acid
Lyophilized
Purity: 98%
A high purity preparation enzymatically assayed using ADH and LDH.
Available in bulk quantities.
$C_{21}H_{27}N_7O_{14}P_2$ MW 663.4

194715 0°C — **β-NICOTINAMIDE ADENINE DINUCLEOTIDE PHOSPHATE** — 25 mg, 50 mg, 100 mg, 250 mg, 500 mg, 1 g
[1184-16-3]
(β-NADP; TPN; Triphosphopyridine nucleotide)
Sodium Salt
Cell Culture Reagent
Purity: 98-100%
$C_{21}H_{27}N_7O_{17}P_3Na$ MW 765.4

194716 RT — **NICOTINIC ACID** — 100 g, 500 g, 1 kg
[59-67-6]
(Pyridine-3-carboxylic acid)
Cell Culture Reagent
Purity: 99+%
Crystalline
Free Acid
$C_6H_5NO_2$ MW 123.1

194717 0°C — **OLEIC ACID** — 1 g, 5 g, 25 g
[112-80-1]
(9-Octadecenoic acid)
Cell Culture Reagent
Purity: 99+%
1 ml = approx. 0.89 g
$C_{18}H_{34}O_2$ MW 282.5

194718 RT — **L-ORNITHINE** — 5 g, 25 g, 100 g, 500 g, 1 kg
[3184-13-2]
(L-2,5-Diaminopentanoic acid)
Cell Culture Reagent
Hydrochloride
Crystalline
Purity: ~99%
This material is essentially free of citrulline and ammonia.
$C_5H_{12}N_2O_2 \bullet HCl$ MW 168.6

194719 0°C — **OXALACETIC ACID** — 5 g, 25 g, 100 g
[328-42-7]
(Oxobutanedioic acid)
Cell Culture Reagent
Purity: 98-99%
$C_4H_4O_5$ MW 132.1

194721 0°C — **D-PANTOTHENIC ACID** — 100 g, 500 g
[137-08-6]
(D-Calcium pantothenate)
Cell Culture Reagent
Calcium Salt
Crystalline
$C_9H_{16}NO_5 \bullet 1/2Ca$ MW 238.3

104808 RT — **PEPTONE** — 1 lb, 5 lb, 10 lb
Bacteriological Grade
Suitable for bacteriological growth media

104806 RT — **PEPTONE I** — 1 lb, 5 lb
Especially processed to be high in Tryptophan. Excellent in cultivation for indole production and cultivation of diptheroids

104807 RT — **PEPTONE S** — 1 lb, 5 lb
Useful for incorporation into media used in hydrogen sulfide tests.

104569 RT — **PEPTONE T** — 1 lb, 5 lb, 25 lb
A tryptic digest of tissue

194597 RT — **PHENOL RED** — 1 g, 5 g, 10 g, 25 g
[34487-61-1]
Sodium Salt
Cell Culture Reagent
(Phenolsulfonphthalein)
Water soluble
pH indicator: 6.8 (yellow)-8.2 (red)
$C_{19}H_{13}O_5SNa$ MW 376.4

194722 RT — **DL-PHENYLALANINE** — 5 g, 25 g, 100 g, 1 kg
[150-30-1]
Cell Culture Reagent
Purity: 99%
$C_9H_{11}NO_2$ MW 165.2

194723 RT — **L-PHENYLALANINE** — 25 g, 100 g, 250 g, 500 g, 1 kg
[63-91-2]
(L-2-Amino-3-phenylpropanoic acid)
Cell Culture Reagent
Purity: >99%
$C_9H_{11}NO_2$ MW 165.2

194878 RT — **PHOSPHORIC ACID, ACS** — 100 g, 500 g
[7664-38-2]
Aqueous solution
ACS Reagent Grade
Purity: ≥85%
H_3PO_4 MW 98.0

152557 RT — **POTASSIUM BICARBONATE, ACS** — 100 g, 1 kg, 5 kg
[298-14-6]
ACS Reagent Grade
Purity: 99.7-100.5%
$KHCO_3$ MW 100.12

194726 RT — **POTASSIUM CHLORIDE** — 250 g, 500 g, 1 kg, 5 kg
[7447-40-7]
Cell Culture Reagent
Crystalline
Purity: 99%
KCl MW 74.55

191513 RT — **POTASSIUM IODIDE** — 100 g, 500 g, 1 kg
[7681-11-0]
Crystalline
KI MW 166.00

191428 RT — **POTASSIUM NITRATE, ACS** — 100 g, 500 g, 1 kg, 5 kg
[7757-79-1]
ACS Reagent Grade
Insoluble Matter: ≤0.005%
Crystalline
KNO_3 MW 101.1

194727 RT — **POTASSIUM PHOSPHATE MONOBASIC** — 100 g, 500 g, 1 kg
[7778-77-0]
Cell Culture Reagent
Anhydrous
Crystalline
Purity: 99+%
KH_2PO_4 MW 136.09

195455 RT — **PRISTANE** — 100 ml, 250 ml
[1921-70-6]
(2,6,10,14-Tetramethylpentadecane)
1 ml = approx. 0.785 gm
Useful as a biological marker.
$C_{19}H_{40}$ MW 268.5

194728 RT — **L-PROLINE** — 25 g, 100 g, 1 kg
[147-85-3]
Cell Culture Reagent
Crystalline
Purity: 99+%
Hydroxy-L-proline free
$C_5H_9NO_2$ MW 115.1

151955 RT — **PROPIONIC ACID** — 100 ml, 500 ml, 1 liter
[79-09-4]
(Propanoic Acid)
Free Acid
Purity: ≥99%
1 ml = approx. 0.99 g
$C_3H_6O_2$ MW 74.1

102924 RT — **PROPIONIC ACID** — 100 g, 500 g, 1 kg
[137-40-6]
Fungicide, mold preventative
Sodium Salt
Crystalline
Purity: ~99%
$C_3H_5O_2Na$ MW 96.1

194729 RT — **PROTAMINE SULFATE** — 1 g, 5 g, 10 g, 25 g, 100 g
[9009-65-8]
Cell Culture Reagent
From Salmon Sperm
Highly purified
Nitrogen: Approx. 22.5%
Hygroscopic white powder.

100450 RT — **PUTRESCINE** — 1 g, 5 g, 25 g, 100 g
[333-93-7]
(Diaminobutane dihydrochloride)
Dihydrochloride
Crystalline
Purity: ~98%
$C_4H_{12}N_2 \bullet 2HCl$ MW 161.1

194730 0°C — **PYRIDOXAL** — 500 mg, 1 g, 5 g, 25 g
[65-22-5]
Cell Culture Reagent
Hydrochloride
$C_8H_9NO_3 \bullet HCl$ MW 203.6

194731 0°C — **PYRIDOXAL-5-PHOSPHATE** — 100 mg, 500 mg, 1 g, 5 g
[54-47-7]
Cell Culture Reagent
Monohydrate
Purity: ~98%
$C_8H_{10}NO_6P \bullet H_2O$ MW 265.1

194732 0°C — **PYRIDOXAMINE** — 250 mg, 1 g, 5 g
[524-36-7]
Cell Culture Reagent
Dihydrochloride
Purity: 99%
Crystalline
$C_8H_{12}N_2O_2 \bullet 2HCl$ MW 241.1

194733 RT — **PYRIDOXINE** — 10 g, 25 g, 50 g, 100 g
[58-56-0]
(Vitamin B_6)
Cell Culture Reagent
Hydrochloride
Purity: 98%
$C_8H_{11}NO_3 \bullet HCl$ MW 205.6

194734 0-5°C — **PYRUVIC ACID** — 25 g, 100 g, 500 g
[113-24-6]
(Sodium α-ketopropionate; Sodium 2-oxopropanoate)
Cell Culture Reagent
Sodium Salt
Purity: 99+%
$C_3H_3O_3Na$ MW 110

102797 RT — **D-(+)-RAFFINOSE** — 25 g, 100 g, 500 g
[17629-30-0]
(Melitose)
Crystalline
Pentahydrate
$C_{18}H_{32}O_{16} \bullet 5H_2O$ MW 594.5

194735 0-5°C — **RIBOFLAVIN** — 25 g, 100 g
[83-88-5]
(Vitamin B_2)
Cell Culture Reagent
Crystalline
Purity: 98%
$C_{17}H_{20}N_4O_6$ MW 376.4

194736 0-5°C — **D-(-)-RIBOSE** — 5 g, 25 g, 100 g
[50-69-1]
Cell Culture Reagent
Purity: 99%
Crystalline
$C_5H_{10}O_5$ MW 150.1

102868 RT — **DL-SERINE** — 25 g, 100 g, 1 kg
[302-84-1]
(DL-2-Amino-3-hydroxypropionic acid)
Crystalline
$C_3H_7NO_3$ MW 105.1

194737 RT — **L-SERINE** — 25 g, 100 g
[56-45-1]
(L-2-Amino-3-hydroxypropionic acid)
Cell Culture Reagent
Purity: 99+%
Crystalline
$C_3H_7NO_3$ MW 105.1

195496 RT — **SODIUM ACETATE, ACS** — 500 g, 1 kg, 2 kg
[127-09-3]
Anhydrous
ACS Reagent Grade
Crystalline
Purity: 99%
$NaC_2H_3O_2$ MW 82.03

194553 — **SODIUM BICARBONATE** — 500 g, 1 kg, 5 kg
[144-55-8]
Cell Culture Reagent
Crystalline
Purity: 99.5%
$NaHCO_3$ MW 84.01

194738 RT — **SODIUM CHLORIDE** — 500 g, 1 kg, 5 kg, 10 kg
[7647-14-5]
Cell Culture Reagent
Purity: 99.5% min.
NaCl MW 58.44

194864 RT **SODIUM FLUORIDE, ACS** — 100 g, 500 g
[7681-49-4]
ACS Reagent Grade
Purity: ≥99%
NaF MW 41.99

194739 RT **SODIUM PHOSPHATE DIBASIC** — 100 g, 500 g, 1 kg, 5 kg
[7558-79-4]
(Disodium hydrogen phosphate)
Cell Culture Reagent
Anhydrous
Na_2HPO_4 MW 141.96

194740 RT **SODIUM PHOSPHATE MONOBASIC** — 100 g, 500 g, 1 kg
[7558-80-7]
(Monosodium phosphate)
Cell Culture Reagent
Anhydrous
NaH_2PO_4 MW 120

194741 RT **SODIUM SELENITE** — 10 g, 25 g, 100 g, 500 g
[10102-18-8]
Cell Culture Reagent
Purity: ~98%
Na_2SeO_3 MW 172.9

102937 RT **SORBIC ACID** — 100 g, 250 g, 500 g
[110-44-1]
(2,4-Hexanedienoic acid)
Purity: 99+%
Crystalline
Free Acid
$C_6H_8O_2$ MW 112.1

194742 RT **D-SORBITOL** — 100 g, 500 g, 1 kg, 5 kg
[50-70-4]
(D-Glucitol)
Cell Culture Reagent
Anhydrous
Crystalline
Purity: 98-99%
$C_6H_{14}O_6$ MW 182.2

152070 0°C **SPERMINE** — 250 mg, 500 mg, 1 g, 5 g
[71-44-3]
Free Base
Purity: 97+%
This is a purified form of our Spermine. This is the highest purity spermine we've seen, and most others claim lower quality or make no claims about purity.
$C_{10}H_{26}N_4$ MW 202.3

194744 RT **STANNOUS CHLORIDE** — 100 g, 500 g
[10025-69-1]
Cell Culture Reagent
Dihydrate
$SnCl_2 \bullet 2H_2O$ MW 225.6

194747 RT **SUCROSE** — 500 g, 1 kg, 5 kg
[57-50-1]
Cell Culture Reagent
Crystalline
$C_{12}H_{22}O_{11}$ MW 342.3

190117 **SUPEROXIDE DISMUTASE** — 3 KU, 15 KU, 30 KU, 75 KU
[9054-89-1]
From Bovine Erthrocytes
(Superoxide: Superoxide oxidoreductase)
E.C. 1.15.1.1
Lyophilized salt-free powder
Activity: 3,500 U/mg
Unit Definition: That amount of enzyme causing a 50% inhibition in the rate of assay based on the method of McCord, J.M. and Fridovich, (1969), J. Biol. Chem., **1**, 6049.

194748 RT **TAURINE** — 10 g, 25 g, 100 g, 1 kg
[107-35-7]
(2-Aminoethanesulfonic acid)
Cell Culture Reagent
Crystalline
Purity: 99%
Amino acid found in most animal tissues, but lacking in plants.
$C_2H_7NO_3S$ MW 125.1

194749 RT **THIAMINE** — 25 g, 100 g, 250 g
[67-03-8]
(Vitamin B_1)
Cell Culture Reagent
Crystalline
Hydrochloride
Used in fluorometric determination of mercury
$C_{12}H_{17}N_4OSCl \bullet HCl$ MW 337.3

194751 RT **DL-THIOCTIC ACID** — 1 g, 5 g, 25 g
[1077-28-7]
(α-Lipoic acid)
Cell Culture Reagent
Purity: 98-99%
$C_8H_{14}O_2S_2$ MW 206.3

156867 0°C **DL-6,8-THIOCTIC ACID AMIDE** — 1 g, 5 g
[3206-73-3]
(DL-Lipoamide)
Oxidized Form
Purity: ≥99%
Crystalline
$C_8H_{15}NOS_2$ MW 205.3

194752 RT **DL-THREONINE** — 10 g, 25 g, 100 g
[6028-28-0]
(DL-2-Amino-3-hydroxybutyric acid)
Cell Culture Reagent
Purity: 99%
Crystalline
$C_4H_9NO_3$ MW 119.1

194753 RT **L-THREONINE** — 1 g, 5 g, 10 g, 25 g, 100 g
[72-19-5]
Cell Culture Reagent
Purity: 99%
Crystalline
$C_4H_9NO_3$ MW 119.1

194754 RT **THYMIDINE** — 1 g, 5 g, 10 g, 25 g
[50-89-5]
(1-[2-Deoxy-β-D-ribofuranosyl]-5-methyluracil)
Cell Culture Reagent
Crystalline
Purity: 99-100%
$C_{10}H_{14}N_2O_5$ MW 242.2

103060 0°C **THYMINE** — 10 g, 25 g, 100 g
[65-71-4]
(5-Methyluracil)
Crystalline
Purity: ~99%
$C_5H_6N_2O_2$ MW 126.1

152147 0°C **D-α-TOCOPHEROL** — 10 g, 25 g, 100 g
[59-02-9]
(Vitamin E)
Mixed isomers from vegetable oil
Yellow to reddish oil
$C_{29}H_{50}O_2$ MW 430.7

190692 0-5°C **D-α-TOCOPHEROL ACETATE** — 10 g, 25 g, 100 g
[58-95-7]
(Vitamin E acetate)
Crystallized from natural α-tocopherol
Since the melting point is approx. 20°C, this product is usually an oil.
$C_{31}H_{52}O_3$ MW 472.8

194756 RT **D-(+)-TREHALOSE** — 5 g, 10 g, 25 g, 100 g
[6138-23-4]
(Mycose,1-O-α-D-glucopyranosyl-α-D-glucopyranoside)
Cell Culture Reagent
Dihydrate
Purity: 99+%
Crystalline
$C_{12}H_{22}O_{11} \bullet 2H_2O$ MW 378.3

194757 RT **DL-TRYPTOPHAN** — 5 g, 25 g, 100 g
[54-12-6]
(DL-2-Amino-3-indolepropionic acid)
Cell Culture Reagent
Purity: 99%
Crystalline
$C_{11}H_{12}N_2O_2$ MW 204.2

194758 RT — L-TRYPTOPHAN — 1 g, 5 g, 25 g, 100 g, 500 g
[73-22-3]
(L-2-Amino-3-indolepropionic acid)
Cell Culture Reagent
Purity: 99+%
Crystalline
$C_{11}H_{12}N_2O_2$ MW 204.2

1682149 — **TRYPTOSE PHOSPHATE BROTH** — 100 ml
(Liquid)
Concentration: 29.5 mg/ml
Storage temperature: 15-30°C

193436 — **TRYPTOSE PHOSPHATE BROTH** — 100 g, 500 g, 1 kg
Powdered form of ICN Cat. No. 1682149.

194724 RT — **TWEEN 20** — 100 ml, 500 ml, 4 liter
[9005-64-5]
(Polyoxyethylenesorbitan monolaurate)
Cell Culture Reagent
Syrup
Purity: Approx. 55% lauric acid

194725 RT — **TWEEN 80** — 100 ml, 500 ml, 4 liter
[9005-65-6]
(Polyoxyethylenesorbitan monooleate)
Cell Culture Reagent
Syrup
Purity: ~75% oleic acid

194759 RT — L-TYROSINE — 50 g, 100 g, 500 g
[60-18-4]
(β-p-Hydroxyphenylalanine)
Cell Culture Reagent
Free Base
Crystalline
$C_9H_{11}NO_3$ MW 181.2

194760 0°C — L-TYROSINE — 250 mg, 1 g, 5 g, 10 g, 25 g
[16870-43-2]
Cell Culture Reagent
Hydrochloride
Crystalline
$C_9H_{11}NO_3 \bullet HCl$ MW 217.7

105573 RT — L-TYROSINE — 25 g, 100 g, 500 g
[69847-45-6]
Sodium Salt
Crystalline
$C_9H_9NO_3Na_2$ MW 225.2

194761 RT — **URACIL** — 5 g, 25 g, 100 g, 500 g, 1 kg
[66-22-8]
(2,4-Dihydroxypyrimidine)
Cell Culture Reagent
Crystalline
This material is high purity, with white crystals.
$C_4H_4N_2O_2$ MW 112.1

194762 RT — **UREA** — 100 g, 500 g, 1 kg, 5 kg
[57-13-6]
(Carbamide)
Cell Culture Reagent
Crystalline
CH_4N_2O MW 60.06

194763 RT — **URIDINE** — 1 g, 5 g, 50 g
[58-96-8]
(1-β-D-Ribofuranosyluracil)
Cell Culture Reagent
Crystalline
Purity: ~99%
$C_9H_{12}N_2O_6$ MW 244.2

194766 0°C — **URIDINE-5′TRIPHOSPHATE** — 10 mg, 25 mg, 100 mg, 500 mg, 1 g
[19817-92-6]
Trisodium Salt
Cell Culture Reagent
Dihydrate
White amorphous powder
Purity: 97-99%
$C_9H_{12}N_2O_{15}P_3Na_3$ MW 550.1

194768 RT — DL-VALINE — 25 g, 100 g, 500 g, 1 kg
[516-06-3]
(DL-2-Amino-3-methylbutanoic acid)
Cell Culture Reagent
Crystalline
Purity: 99%
$C_5H_{11}NO_2$ MW 117.1

194769 RT — L-VALINE — 5 g, 25 g, 100 g, 500 g
[72-18-4]
(L-2-Amino-3-methylbutanoic acid)
Cell Culture Reagent
Crystalline
Purity: 99%
$C_5H_{11}NO_2$ MW 117.1

103257 0-5°C — **VITAMIN A ACETATE** — 10 g, 25 g, 100 g
[127-47-9]
(Retinyl acetate; Retinol acetate)
Dry: 500,000 IU/gm
$C_{22}H_{32}O_2$ MW 328.5

903288 0-5°C — **WHEAT GERM** — 5 lb, 25 lb, 100 lb
Natural source-vitamin B complex

103291 RT — **XANTHINE** — 5 g, 10 g, 25 g
[1196-43-6]
Sodium Salt
Crystalline
Purity: 98-100%
$C_5H_3N_4O_2Na$ MW 174.1

3000049 -20-0°C — **YEAST EXTRACT** — 100 ml
25% (w/v) solution

103303 0-5°C — **YEAST EXTRACT POWDER** — 100 g, 500 g, 1 kg
A vacuum dried extract concentrate of Baker's yeast containing the B-complex factors of approximately three times its weight of ordinary dry yeast.

193899 RT — **ZINC CHLORIDE** — 100 g, 500 g, 1 kg
[7646-85-7]
Purity: ≥97%
$ZnCl_2$ MW 136.3

193453 RT — **ZINC SULFATE** — 100 g, 500 g, 1 kg
[7446-20-0]
Heptahydrate
Purity: ≥98%
$ZnSO_4 \bullet 7H_2O$ MW 287.5