CATALOG NUMBER | U.S. $

-A-

A23187
See: Antibiotic A23187

AA-861 — 20 mg 72.70; 100 mg 326.40
159061 | 0°C
Purity: 95%
Orally active, specific and potent inhibitor of 5-lipoxygenase.
Ref.: 1. Yoshimoto, T., et.al., Biochim. Biophys. Acta, **713**, 470 (1982). 2. Ashida, Y., et.al., Prostaglandins, **26**, 955 (1983). 3. Ancill, R.J., et.al., J. Int. Med. Res., **18**, 75 (1990).
$C_{21}H_{26}O_3$ MW 326.4

ABL PROTEIN TYROSINE KINASE — 250 U 47.25; 1 KU 162.75
195876 | -70°C
(v-abl)
Recombinant
Expressed in *E. coli*
A truncated form of the v-*abl* protein tyrosine kinase which contains the minimum region needed for kinase activity and fibroblast transformation. Suppresses apoptosis and induces resistance to anti-cancer compounds.
Activity: 100 KU/ml
Unit Definition: one unit is the amount of enzyme which catalyzes the transfer of 1 pmol of phosphate to EAIYAAPFAKKK per minute at 30°C, pH 7.5.
Contains no detectable phosphatase and protease and only trace amounts of RNase and DNase.
MW 45 kDa

ACACETIN — 10 mg 17.50; 50 mg 85.00
193972 | 0-5°C
[480-44-4]
(5,7-Dihydroxy-4′-methoxyflavone)
Possesses antioxidant properties and an inhibitor of rat liver glutathione S-transferase.
Ref.: Zhang, K. and Das, N.P., Biochem. Pharmacol., **47**, 2063 (1994).
$C_{16}H_{12}O_5$ MW 284.3

ACETATE KINASE — 250 U 50.00; 1 KU 189.80
154678 | 0-5°C
[9027-42-3]
(ATP: Acetate phosphotransferase)
EC 2.7.2.1
From *Escherichia coli*
Activity: 150-300 units/mg protein (Biuret).
Unit Definition: One unit will phosphorylate 1.0 μmole of acetate to acetylphosphate per min at pH 7.6 at 25°C.
Suspension in 3.2 M $(NH_4)_2SO_4$ solution, pH approx. 6.0.
Contains less than 0.01% glutamic-oxalacetic transaminase, lactic dehydrogenase, myokinase and NADH oxidase.

ACETOHEXAMIDE — 1 g 22.05; 5 g 88.20
193572 | RT
[968-81-0]
(4-Acetyl-N-[(cyclohexylamino)-carbonyl]benzenesulfonamide)
Hypoglycemic agent
$C_{15}H_{20}N_2O_4S$ MW 324.4

ACETOPROMAZINE — 1 g 10.30
154683 | RT
[61-00-7]
(2-Acetyl-10-[3-dimethyl-aminopropyl]phenothiazine)
Maleate Salt
$C_{19}H_{22}N_2OS \bullet C_4H_4O_4$ MW 442.5

N-[2-(ACETOXY)ETHYL]-3-PYRIDINECARBOXAMIDE — 1 mg 19.00; 5 mg 75.00; 10 mg 121.00; 25 mg 253.00
159681 | 0-5°C
(Nicorandil Analog; SG-209)
An analog of nicorandil that acts as a nitrate-free vasodilator through activation of potassium channels.
$C_{10}H_{12}N_2O_3$ MW 207.2

3-(N-ACETYLAMINO)-5-(N-DECYL-N-METHYLAMINO)BENZYL ALCOHOL — 1 mg 27.50; 5 mg 89.40
159549 | 0-5°C
[103955-90-4]
(ADMB)
A Protein Kinase C activator.
Ref.: Proc. Nat. Acad. Sci. USA, **83**, 4214 (1986).
$C_{20}H_{34}N_2O_2$ MW 334.5

N-ACETYL-ASP-GLU — 25 mg 45.00; 100 mg 156.00; 250 mg 303.65
153036 | -20-0°C
[3106-85-2]
An endogenous neuropeptide with high affinity for a brain "Glutamate" receptor.
Ref: Zaczek, R., et al., Proc. Natl. Acad. Sci. (USA), **80**, 1116 (1983).
$C_{11}H_{18}N_2O_8$ MW 304.3

N-ACETYL-2-BENZYLTRYPTAMINE
See: Luzindole

ACETYL-DL-CARNITINE — 250 mg 60.00; 1 g 214.00
154690 | 0°C
[2504-11-2]
Hydrochloride
Crystalline
$C_9H_{17}NO_4 \bullet HCl$ MW 239.7

O-ACETYL-L-CARNITINE CHLORIDE — 500 mg 11.45; 1 g 20.65; 5 g 97.45
159062 | 0-5°C
[5080-50-2]
(R-(-)-2-Acetyloxy-3-carboxy-N,N,N-trimethyl -1-propanaminium chloride)
Purity: >88%
A cholinergic agonist that stimulates neuronal response to serotonin and acetylcholine.
$C_9H_{18}NO_4Cl$ MW 239.7

ACETYLCHOLINE CHLORIDE, [ACETYL-1-^{14}C] — 50 μCi 251.35; 250 μCi 995.00
17032 | 0-5°C
Sp. Act. 1-10 mCi/mmol
37-370 MBq/mmol
Ethanol
Ref.: Nicholas, C., et al., *J. Neurochem.*, **62**, 1835-1839 (1994).
$CH_3CO_2CH_2CH_2N(CH_3)_3Cl$ MW 181.6

ACETYL COENZYME A — 1 mg 11.25; 5 mg 27.85; 10 mg 50.50; 25 mg 111.15; 100 mg 359.00
100490 | 0°C
[72-89-9]
Trilithium Salt
Trihydrate
Purity: 92-95%
$C_{23}H_{35}Li_3N_7O_{17}P_3S \bullet 3H_2O$ MW 881.1

N-ACETYL-L-CYSTEINE — 25 g 22.00; 50 g 36.75; 100 g 66.25; 500 g 223.30; 1 kg 365.20
100098 | 0-5°C
[616-91-1]
Crystalline
Purity: >96%
A mucolytic agent for isolation of mycobacteria from sputum.
$C_5H_9NO_3S$ MW 163.2

N-ACETYL-L-CYSTEINE — 5 g 12.75; 10 g 20.00; 25 g 28.10; 50 g 45.00; 100 g 84.25; 500 g 260.20
194603 | 0-5°C
[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

N-ACETYL-L-CYSTEINE, [1-^{14}C] — 50 μCi 1332.80
16010 | 0-5°C
Sp. Act. 25-50 mCi/mmol
0.925-1.85 GBq/mmol
Ethanol solution.
$HSCH_2CH(NHCOCH_3)COOH$
MW 163.2

4-ACETYL-1,1-DIMETHYL-PIPERAZINIUM IODIDE — 5 mg 59.65; 10 mg 108.95; 25 mg 217.85
159683 | RT
A nicotinic acid agonist
$C_8H_{17}N_2OI$ MW 284.1

N-ACETYLDOPAMINE — 10 mg 16.80; 25 mg 33.10; 100 mg 90.10; 500 mg 247.20
150229 | 0°C
Crystalline
Metabolite of dopamine
$C_{10}H_{13}NO_3$ MW 195.2

CATALOG NUMBER			U.S. $
193573 RT	**γ-ACETYLENIC GABA** [57659-38-3] (4-Amino-5-hexynoic acid) A GABA transaminase inhibitor. **Ref.:** Schousboe, et al., Neurochem. Res., **11**, 1497 (1986). $C_6H_9NO_2$ MW 127.1	1 mg 5 mg 25 mg	11.00 44.10 198.45
159030 -20°C	**N-ACETYL-S-FARNESYL-L-CYSTEINE** (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	5 mg 25 mg	71.35 306.00
26020 0-5°C	**N-ACETYL-S-FARNESYL-L-CYSTEINE, [Cysteine-1-^{3}H]** Sp. Act. 10-20 Ci/mmol 370-740 MBq/mmol Ethanol Shipped in dry ice. *Please call for delivery information.* MW 367.5	50 µCi 250 µCi	605.15 1817.90
195681 -20°C	**N-ACETYL-S-GERANYL-L-CYSTEINE** (AGC) **Purity: 98%** A biologically inactive close structural analog of AFC and AGGC. Used as a negative control. MW 299.4	1 mg 5 mg	20.20 92.40
159845 -20°C	**N-ACETYL-S-GERANYLGERANYL-L-CYSTEINE** [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	5 mg 10 mg	131.90 229.30
158221 -20°C	**N-ACETYL-D-GLUCOSAMINYL-β-(1→4)-N-ACETYLMURAMYL-L-ALANYL-D-ISOGLUTAMINE** (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).	1 mg 5 mg	28.00 125.95

CATALOG NUMBER			U.S. $
100182 0°C	**N-α-ACETYLGLYCYL-L-LYSINE METHYL ESTER** [14752-92-2] (AGLME) **Acetate Salt** **Crystalline** Substrate for measurement of urokinase activity. **Ref.:** Walton, P.L., Biochem. Biophys. Acta, **132**, 104 (1967). $C_{11}H_{21}N_3O_4 \bullet C_2H_4O_2$ MW 319.4	100 mg 250 mg 1 g 5 g	8.80 17.80 60.90 280.55
159684 RT	**1-ACETYL-4-METHYLPIPERAZINE Hydrochloride** A nicotinic acid agonist $C_7H_{14}N_2O \bullet HCl$ MW 178.7	5 mg 10 mg 25 mg	59.65 108.95 217.85
194605 0-5°C	**N-ACETYLNEURAMINIC ACID** [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	10 mg 25 mg 100 mg 250 mg 500 mg 1 g	12.65 25.35 66.15 145.55 248.05 439.90
195854 0-5°C	**N-ACETYLNEURAMINIC ACID** [131-48-6] (Sialic Acid; NANA) **From Bovine Milk** $C_{11}H_{19}NO_9$ MW 309.3	5 mg 25 mg 100 mg	10.50 37.80 131.25
195855 0-5°C	**N-ACETYLNEURAMINIC ACID** [131-48-6] (Sialic Acid; NANA) **From Egg** **Purity: ≥97%** $C_{11}H_{19}NO_9$ MW 309.3	10 mg 50 mg 250 mg	12.60 52.50 236.25
153039 -20-0°C	**N-ACETYL-PHE-NLE-ARG-PHE AMIDE** [83903-28-0] A molluscan cardioexcitatory neuropeptide analog. $C_{23}H_{46}N_8O_5$ MW 622.8	0.5 mg 1 mg 5 mg	18.00 30.00 131.00
193574 -20°C	**N-ACETYLPROCAINAMIDE** [34118-92-8] (4-(Acetylamino)-N-[2-(diethylamino)ethyl]benzamide) **Hydrochloride** A metabolite of procainamide that blocks potassium channels and exhibits some antiarrhythmic activity. $C_{15}H_{23}N_3O_2 \bullet HCl$ MW 313.8	250 mg 1 g	11.95 37.95
158923 -20°C	**N-ACETYL-D-SPHINGOSINE** [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	1 mg 5 mg	12.10 40.20
159685 RT	**N-ACETYLTRYPTAMINE** Useful in determination of serotonin N-acetyl transferase $C_{12}H_{14}N_2O$ MW 202.2	5 mg 10 mg 25 mg	45.90 86.00 172.00
154259 -20°C	**ACIVICIN** [42228-92-2] **Purity: 99%** Potent irreversible inhibitor of gamma-glutamyl transpeptidase (ID_{50}=0.54mM). Potent anti-tumor agent. $C_5H_7ClN_2O_3$ MW 178.6	10 mg 100 mg	23.95 164.95

CATALOG NUMBER			U.S. $
154710 **RT**	**ACONITINE** [302-27-2] **Purity: 95%** **Crystalline** $C_{34}H_{47}NO_{11}$ MW 645.7	25 mg 100 mg	60.00 220.00
104658 **0-5°C**	**ACTINOMYCIN D** [50-76-0] **Crystalline** **Purity: ~98%** Potent apoptosis inducer. Soluble in chloroform, acetone, methanol and decomposed by strong acids, light. $C_{62}H_{86}N_{12}O_{16}$ MW 1255.5	1 mg 5 mg 10 mg 25 mg 50 mg 100 mg	15.00 65.00 99.00 205.00 315.00 545.75
194525 **0-5°C**	**ACTINOMYCIN D** [50-76-0] **Cell Culture Reagent** **Crystalline** **Purity: ~98%** Inhibits nucleic acid synthesis and potently induces apoptosis. $C_{62}H_{86}N_{12}O_{16}$ MW 1255.5	2 mg 5 mg 10 mg 25 mg	40.20 61.50 115.75 240.35
196035 **0-5°C**	**ACTINOMYCIN D** [50-76-0] From *Streptomyces parvulus* **Purity: ~98%** Potent apoptosis inducer and nucleic acid synthesis inhibitor. Soluble in methanol. $C_{62}H_{86}N_{12}O_{16}$ MW 1255.5	1 mg 5 mg 25 mg	11.55 48.85 179.00
105460 **0°C**	**ADENOSINE-3′,5′-*cyclo*-MONOPHOSPHATE** [37839-81-9] (Adenosine-3′,5′-Monophosphoric Acid) **Sodium Salt** **Crystalline** **Purity: Approx. 98%** $C_{10}H_{11}N_5O_6PNa$ MW 351.2	25 mg 100 mg 500 mg 1 g	11.45 28.45 89.45 166.40
100056 **0°C**	**ADENOSINE-5′-DIPHOSPHATE** [16178-48-6] ($ADP\text{-}Na_2$) **From Equine Muscle** **Purity: ≥95%** White to off-white powder **Disodium Salt** $C_{10}H_{13}N_5Na_2O_{10}P_2$ MW 471.2	100 mg 500 mg 1 g 5 g	8.05 28.95 47.30 152.80
100080 **0°C**	**ADENOSINE-5′-MONOPHOSPHATE** [18422-05-4] **From Yeast** **Free Acid** **Crystalline** **Purity: 99-100%** $C_{10}H_{14}N_5O_7P$ MW 347.2	1 g 5 g 25 g 100 g	6.70 21.30 51.40 153.70
150264 **0°C**	**ADENOSINE-5′-MONOPHOSPHATE** [4578-31-8] (AMP) **From Yeast** **Disodium Salt** **Crystalline** **Purity: 99-100%** $C_{10}H_{12}N_5Na_2O_7P$ MW 391.2	1 g 5 g 25 g 100 g	7.10 18.20 83.40 301.40
159550 **0°C**	**ADENOSINE-5′-O-THIOMONOPHOSPHATE** [93839-85-1] (AMP-S) **Dilithium Salt** Acts as substrate and inhibitor for AMP-dependent enzyme systems. **Ref.:** Murray, A.W. and Atkinson, M.R., Biochemistry, **7**, 4023 (1968). $C_{10}H_{12}N_5O_6PSLi_2$ MW 375.1	1 mg 5 mg	28.45 94.30
159551 **-20°C**	**ADENOSINE-5′-O-(3-THIOTRIPHOSPHATE)** [93839-89-5] (ATP-γ-S) **Tetralithium Salt** **Purity: >80%** **Ref.:** Chrysogelos, S., et al., J. Biol. Chem., **258**, 12624 (1983). $C_{10}H_{12}N_5O_{12}P_3SLi_4$ MW 547.0	1 mg 5 mg	26.90 89.60
100004 **0°C**	**ADENOSINE-5′-TRIPHOSPHATE** [42373-41-1] **Dipotassium Salt** **Purity: >96%** $C_{10}H_{14}N_5O_{13}P_3K_2$ MW 583.4	500 mg 1 g 5 g	15.40 25.00 118.80
100008 **0°C**	**ADENOSINE-5′-TRIPHOSPHATE** [51963-61-2] (ATP) **Disodium Salt** **Crystalline** **Purity: Approx. 99%** $C_{10}H_{14}N_5Na_2O_{13}P_3$ MW 551.2	1 g 5 g 10 g 25 g 100 g	12.30 38.05 61.50 135.30 439.30
194613 **0°C**	**ADENOSINE-5′-TRIPHOSPHATE** [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	1 g 5 g 10 g	20.60 52.60 94.80
195879 **0-5°C**	**ADENYLATE CYCLASE ACTIVATING PEPTIDE-27** [127317-03-7] (PACAP-27) His-Ser-Asp-Gly-Ile-Phe-Thr-Asp-Ser-Tyr-Ser-Arg-Tyr-Arg-Lys-Gln-Met-Ala-Val-Lys-Lys-Tyr-Leu-Ala-Ala-Val-Leu-NH_2 **Purity: ≥97%** MW 3147.6	25 µg 100 µg	47.25 131.25
195880 **0-5°C**	**ADENYLATE CYCLASE ACTIVATING PEPTIDE, Fragment 6-27** [136134-68-4] Phe-Thr-Asp-Ser-Tyr-Ser-Arg-Tyr-Arg-Lys-Gln-Met-Ala-Val-Lys-Lys-Tyr-Leu-Ala-Ala-Val-Leu-NH_2 **Purity: ≥97%** Inhibits PACAP-27 MW 2638.1	100 µg	89.25
195881 **0-5°C**	**ADENYLATE CYCLASE ACTIVATING PEPTIDE-38** [137061-48-4] (PACAP-38) His-Ser-Asp-Gly-Ile-Phe-Thr-Asp-Ser-Tyr-Ser-Arg-Tyr-Arg-Lys-Gln-Met-Ala-Val-Lys-Lys-Tyr-Leu-Ala-Ala-Val-Leu-Gly-Lys-Arg-Tyr-Lys-Gln-Arg-Val-Lys-Asn-Lys-NH_2 More potent than VIP at stimulating adenylate cyclase. MW 4534.3	100 µg	189.00
193589 **0-5°C**	**ADRENALINE ELISA KIT** This adrenaline ELISA kit provides materials for the quantitative measurement of chemically derivatized adrenaline in urine. The assay procedure follows the basic principle of competitive ELISA whereby there is competition between a biotinylated and non-biotinylated antigen for a fixed number of antibody binding sites. The kit is a 12 x 8 well format. *FOR RESEARCH USE ONLY!*	1 each	468.55
	AEBSF *See:* 4-(2-Aminoethyl)-benzenesulfonylfluoride		
	AG-126 *See*: Tyrphostin A10		

CATALOG NUMBER			U.S. $
	AG-370 *See*: Tyrphostin B7		
	AG-490 *See*: Tyrphostin B42		
	AG-494 *See*: Tyrphostin B48		
	AG-555 *See*: Tyrphostin B46		
195715 RT	**AG-879** **Purity: 99%** A tyrphostin family member which inhibits the NGF receptor autophosphorylation selectively with no inhibition of EGF or PDGF receptor phosphorylation. Inhibits NGF-induced neurite outgrowth in PC12 cells. MW 316.5	1 mg 5 mg	23.60 100.80
100274 0°C	**AGMATINE SULFATE** [2482-00-0] (4-Guanidinobutane sulfate; Argamine) **Purity: 95-97%** This is the enzymatic decarboxylation product of arginine, which acts as an imidazoline receptor agonist. $C_5H_{14}N_4 \bullet H_2SO_4$ MW 228.3	250 mg 1 g	20.00 74.85
193575 RT	**AGROCLAVINE** [548-42-5] (8,9-Didehydro-6,8-dimethylergoline) An ergot alkaloid which acts as a dopamine receptor agonist. $C_{16}H_{18}N_2$ MW 238.3	10 mg 25 mg 100 mg	11.00 22.05 79.40
159009 0-5°C	**ALAMETHICIN** [27061-78-5] (Antibiotic U-22324) Mixture of alamethicin homologs. Antibiotic which increases the permeability of membranes. Also increases the incorporation of ^{32}P into phosphatidylinositol 4-phosphate and sarcoplasmic reticulum vesicles permeability. **Ref.:** 1. Brewer, D., et.al., Can. J. Microbiol., **33**, 619 (1987). 2. Quist, E., et.al., Arch. Biochem. Biophys., **271**, 21 (1989).	5 mg 10 mg 25 mg	59.65 113.50 271.15
193576 RT	**ALAPROCLATE** [60719-83-7] (DL-Alanine 2-(4-chlorophenyl)-1,1-dimethylethyl ester) **Hydrochloride** Powerful, selective serotonin uptake inhibitor. $C_{13}H_{18}NO_2Cl \bullet HCl$ MW 292.2	10 mg 25 mg 100 mg	16.55 33.05 121.25
159010 0-5°C	**ALLETHRIN** [584-79-2] (Allethrin I) Mixture of 8 isomers A Type I pyrethrin which demonstrates very weak active "negative" control properties for calcineurin (protein phosphatase 2B) inhibition by Type II pyrethrins. $C_{19}H_{26}O_3$ MW 302.42	10 mg 25 mg 50 mg	35.80 85.40 166.55
195886 RT	**ALLOPREGNANOLONE** [516-54-1] (Allopregnan-3α-ol-20-one; 3α-Hydroxy-5α-20-one) **Purity: ≥95%** A neurosteroid with potent ligand properties against GABA Type A receptor complexes in mammalian CNS potentiating the GABA receptor-mediated chloride uptake in synaptoneurosomes. $C_{21}H_{34}O_2$ MW 318.5	1 mg 5 mg	26.25 110.25
193577 RT	**1-ALLYL-3,7-DIMETHYL-8-PHENYLXANTHINE** [149981-23-7] An A_1 Adenosine receptor antagonist. **Ref.:** Jacobson, et al., J. Med. Chem., **38(18)**, 2639 (1993). $C_{16}H_{16}N_4O_2$ MW 296.3	5 mg 10 mg 25 mg	35.30 66.15 132.30
159860 RT	**3-(4-ALLYLPIPERAZIN-1-YL)-2-QUINOXALINECARBONITRILE** **Purity: 98%** Selective antagonist of serotonin 5-HT_3. **Ref.:** Monge, A., et al., *J. Med. Chem.*, **36**, 2745 (1993). MW 395.4	5 mg 10 mg	98.60 166.25
193579 RT	**ALPHAXALONE** [23930-19-0] (3α-Hydroxy-5α-pregnane-11,20-dione) A neurosteroid which acts upon the $GABA_A$ receptor. **Ref.:** Turner, et al., J. Pharmacol. Exp. Ther., **248**, 960 (1989). $C_{21}H_{32}O_3$ MW 332.5	1 mg 5 mg 10 mg	16.55 55.10 99.20
190092 RT	**L-ALPRENOLOL** [13707-88-5] (L-1[2-Allylphenoxy]-3-isopropyl-aminopropan 2-ol) **Hydrochloride** **Crystalline** **Hydrate** $C_{15}H_{23}NO_2 \bullet HCl \bullet H_2O$ MW 303.8	1 g 5 g 25 g	13.70 44.95 149.65
159778 RT	**ALRESTATIN** [51411-04-2] (1,3-Dioxo-IH-benz[de]isoquinoline-2(3H)-acetic acid) Aldose reductase inhibitor. $C_{14}H_9NO_4$ MW 255.2	5 mg 10 mg 25 mg	45.90 84.85 169.70
159552 RT	**ALUMINUM CHLORIDE** [7784-13-6] (Aluminum trichloride) **Hexahydrate** Often used in aqueous solution with NaF to induce a number of biological effects from generation of the (AlF_4^-) moiety. $AlCl_3 \bullet 6H_2O$ MW 241.4	100 g 500 g 1 kg	8.85 31.00 57.00
159687 RT	**AMBENONIUM DICHLORIDE** [52022-31-8] A reversible, noncovalent inhibitor of acetyl cholinesterase. $C_{28}H_{42}N_4O_2Cl_4$ MW 608.5	5 mg 10 mg 25 mg	59.65 108.95 217.85
153650 0-5°C	**AMFONELIC ACID** [15180-02-6] (7-Benzyl-1-ethyl-1,4-dihydro-4-oxo-1,8-naphthyridine-3-carboxylic acid) Dopamine releaser $C_{18}H_{16}N_2O_3$ MW 308.3	5 mg 10 mg 25 mg	25.05 45.05 100.15
194099 0-5°C	**AMIDINOPHENYL BENZOATE** (APB; Try Inhibitor) **Hydrochloride** A trypsin-like serine protease inhibitor. **Ref.:** Markwardt, F., et al., Acta Biol. Meg. Germ., **28**, k19-k25 (1972).	10 mg 100 mg	16.55 55.10
194956 0-5°C	**p-AMIDINOPHENYLMETHYL-SULFONYLFLUORIDE** [74938-88-8] (p-APMSF) **Hydrochloride** **Purity: >75%** A stable, non-toxic alternative to DFP or PMSF. Specifically and irreversibly inhibits trypsin-like serine proteases, trypsin, and thrombin. Demonstrates activity on factor Xa, plasmin, C1r and C1s. Activity is 1000 fold greater than PMSF. **Ref.:** Cole, T.C., et al., Biochim. Biophys. Acta, **990**, 254 (1989). MW 257.2	1 mg 5 mg	18.00 62.40

CATALOG NUMBER			U.S. $
194100 **0-5°C**	**AMIDINOPHENYLPYRUVIC ACID** (APPA) A polyvalent inhibitor for serine proteases like trypsin, factor IIa, factor Xa, and plasma kallikrein. It is a potent acrosin inhibitor, as well as, an effective inhibitor of thrombin and factor Xa clotting activity. It can distinguish between plasma kallikrein and glandular kallikrein, thrombin, and batroxobin (thrombin-like snake venom enzyme). **Ref.:** Geratz, J.D., Arch. Biochem. Biophys., **118**, 90-6 (1967).	1 mg 10 mg 25 mg	12.65 76.05 165.35
153537 **RT**	**AMILORIDE** [2016-88-8] (3,5-Diamino-N-(aminomethyl)-6-chloropyrazinecarboxamide) **Hydrochloride** A sodium ion channel inhibitor $C_6H_8ClN_7O$ • HCl MW 266.1	50 mg 250 mg 1 g	14.85 36.15 72.25
195856 **0-5°C**	**7-AMINOACTINOMYCIN D** [7240-37-1] (7-AAD; 7-Amino-AMD; 7-Actinomycin C_1; 7-Aminodactinomycin) **Purity: ≥95%** DNA intercalator and growth inhibitor against certain forms of leukemia and sarcomas. MW 1270.4	1 mg	65.70
159028 **RT**	**3-AMINOBENZAMIDE** [3544-24-9] (PARP Inhibitor) **Purity: 97%** Endogenous poly-ADP-ribosyltransferase inhibitor. **Ref.:** Kozak, K.R. and Ross, I.A., Biochem. Biophys. Res. Commun., **179**, 1225 (1991). $C_7H_8N_2O$ MW 136.2	100 mg 250 mg 1 g 5 g	25.60 49.70 133.95 530.00
159861 **RT**	**1-AMINOBENZOTRIAZOLE** [1614-12-6] **Purity: 99%** Suicide inhibitor of cytochrome P-450 and chloroperoxidase. Oxidative drug metabolism inhibitor in *in vivo* studies. **Ref.:** 1. Matthews, J.M., et al., *J. Pharmacol. Exp. Ther.*, **235**, 186 (1985). 2. Mico, B.A., et al., *Biochem. Toxicol.*, **37**, 2515 (1988). 3. Mugford, C.A., et al., *Fundam. Appl. Toxicol.*, **19**, 43 (1992). $C_6H_6N_4$ MW 134.1	20 mg 50 mg 100 mg	30.00 70.00 130.60
195664 **0-5°C**	**p-AMINOBENZOYL-GLY-PRO-D-LEU-D-ALA-HYDROXAMIC ACID** [124168-73-6] **Purity: 97%** Broad spectrum protease inhibitor against human matrix metalloproteinase, collagenase, gelatinase and stromelysin. $C_{23}H_{34}N_6O_6$ MW 490.6	1 mg 5 mg	20.00 84.20
193738 **RT**	**AMINOBENZTROPINE** (3-(2'-Aminobenzhydryloxy)tropane) Muscarinic ligand with very high affinity. Useful for solubilizing muscarinic receptors. **Ref.:** Haga, et al., J. Biol. Chem., **258**, 13575 (1983). $C_{21}H_{26}N_2O$ MW 322.4	5 mg 25 mg 100 mg	16.55 55.10 198.45
159690 **0-5°C**	**N-(4-AMINOBUTYL)-5-CHLORO-2-NAPHTHALENESULFONAMIDE** [88519-57-7] (W-13) **Hydrochloride** A calmodulin antagonist **Ref.:** Stroble and Peterson, J. Pharm. Exp. Ther., **263**, 186 (1992). $C_{14}H_{17}N_2O_2SCl$ • HCl MW 349.3	1 mg 5 mg 10 mg	55.20 218.50 393.65
159691 **0-5°C**	**N-(4-AMINOBUTYL)-2-NAPHTHALENESULFONAMIDE** [89108-46-3] (W-12) **Hydrochloride** A calmodulin antagonist. **Ref.:** Hidaka, et al., Proc. Nat. Acad. Sci. USA, **78**, 4354 (1981). $C_{14}H_{18}N_2O_2S$ • HCl MW 314.8	1 mg 5 mg 10 mg	55.25 218.60 393.65
16011 **0-5°C**	**γ-AMINOBUTYRIC ACID, [4-^{14}C]** Sp. Act. 50-60 mCi/mmol 1.85 -2.22 GBq/mmol 0.01N HCl solution. *Please call for delivery information.* $H_2NCH_2(CH_2)_2COOH$ MW 137.0	50 µCi 250 µCi	447.50 1150.90
100278 **RT**	**γ-AMINO-n-BUTYRIC ACID** [56-12-2] (GABA; 4-Aminobutanoic acid) **Crystalline** **Purity: Approx. 99%** $C_4H_9NO_2$ MW 103.1	10 g 25 g 100 g 500 g 1 kg	6.85 9.85 23.60 93.50 152.90
693281 **0-5°C**	**γ-AMINOBUTYRIC ACID** *MONOCLONAL ANTIBODY* **Anti-GABA** **Clone:** AD5A9 **Isotype:** mouse IgG_1 presented affinity purified **Conc/Titer:** 100 µg/ml Applications: Immunohistochemistry The original immunogen was GABA coupled to BSA. The antibody is highly specific to GABA, a non-protein amino acid neurotransmitter, and does not react with other amino acids.	10 µg	86.20
	5-AMINO-3-(3-CHLORO-2-METHYLPHENYL)-1,2,3,4-OXATRIAZOLIUM *See*: GEA 5024		
159693 **RT**	**3-AMINO-2-(4-CHLOROPHENYL)-2-HYDROXYPROPANESULFONIC ACID** [117354-64-0] (2-Hydroxysaclofen) **Purity: 98% min.** Selective antagonist at $GABA_B$ receptors. Also see Phaclofen $C_9H_{12}NO_4SCl$ MW 265.7	1 mg 5 mg 10 mg	20.00 75.00 142.80
159692 **RT**	**3-AMINO-2-(4-CHLOROPHENYL)-PROPANE SULFONIC ACID** [125464-42-8] (Saclofen) Selective antagonist at $GABA_B$ receptors. $C_9H_{12}NO_3SCl$ MW 249.7	1 mg 5 mg 10 mg	28.65 114.65 217.85
	3-AMINO-2-(4CHLOROPHENYL)PROPANE-PHOSPHONIC ACID *See*: Phaclofen		
153649 **0-5°C**	**p-AMINOCLONIDINE** [73217-88-6] **Hydrochloride** α_2-Adrenergic receptor agonist $C_9H_{10}Cl_2N_4$ • HCl MW 281.5	1 mg 5 mg 10 mg	23.95 78.35 129.90
159694 **-20°C**	***cis*-4-AMINOCROTONIC ACID** [55199-25-2] (Z-4-Amino-2-butenoic acid) An analog of GABA. Used as a probe for bicuculline-insensitive GABA receptors. $C_4H_7NO_2$ MW 101.1	1 mg 5 mg	28.65 114.65
159695 **RT**	***trans*-4-AMINOCROTONIC ACID** [38090-53-8] (E-4-Amino-2-butenoic acid) Potent bicuculline-sensitive GABA agonist and GABA uptake inhibitor. $C_4H_7NO_2$ MW 101.1	1 mg 5 mg 25 mg	17.20 63.05 252.25

Neuroscience

CATALOG NUMBER			U.S. $
159696 RT	**1-AMINOCYCLOBUTANE-CARBOXYLIC ACID** [22264-50-2] A specific NMDA receptor antagonist which acts at the glycine site. **Ref.:** Hood, et al., Eur. J. Pharmacol., **161**, 281 (1989). $C_5H_9NO_2$ MW 115.1	5 mg 10 mg 50 mg	29.80 53.00 212.10
158856 RT	**1-AMINOCYCLOBUTANE-*cis*-1,3-DICARBOXYLIC ACID** [117488-23-0] (trans-1-Aminocyclobutane-1,3-dicarboxylic acid, IUPAC name) **Monohydrate** **Purity: ≥99%** The most potent and highly selective synthetic NMDA agonist known. **Ref.:** 1. Lanthorn, T.H., et.al., Eur. J. Pharmacol., **182**, 397 (1990). 2. Allen, R.D., et.al., J. Med. Chem., **33**, 2905 (1990). **Note:** Some confusion exists concerning the name of this item, due to contradictions in the literature. This isomer has the two carboxyl groups on the same side of the cyclobutyl ring. $C_6H_9NO_4 \bullet H_2O$ MW 177.16	1 mg 5 mg 10 mg 25 mg	15.50 70.00 120.00 286.00
159702 RT	**(±)-1-AMINOCYCLOPENTANE-*cis*-1,2-DICARBOXYLIC ACID** A structural analog of (±)-1-Amino-cyclopentane-*cis*-1,3-dicarboxylic acid. $C_7H_{11}NO_4$ MW 173.2	1 mg 5 mg 10 mg	21.20 84.85 158.20
159704 RT	**(±)-1-AMINOCYCLOPENTANE-*cis*-1,3-DICARBOXYLIC ACID** [39026-63-6] Potent NMDA agonist. A 1:1 mixture of (1R,3R) & (1S,3S)-enantiomers. $C_7H_{11}NO_4$ MW 173.2	1 mg 5 mg 10 mg	20.00 95.00 183.60
159705 RT	**(±)-1-AMINOCYCLOPENTANE-*trans*-1,3-DICARBOXYLIC ACID** [39026-64-7] Glutamate receptor agonist. A 1:1 mixture of (1R,3R) & (1S,3S)-enantiomers. $C_7H_{11}NO_4$ MW 173.2	1 mg 5 mg 10 mg	33.25 80.00 153.00
26021 0-5°C	**(±)-1-AMINOCYCLOPENTANE-*trans*-1,3-DICARBOXYLIC ACID, [4,5-^{3}H]** Sp.Act. 200-300 mCi/mmol 7.4-11.1 GBq/mmol Ethanol: water solution (2.8) *HPLC Analyzed for Purity.* *Please call for delivery information.* $HOCH_2(CHOH)_3COCH_2OH$ MW 180.2	250µCi 1mCi	1090.25 2060.45
	5-AMINO-3-(3,4-DICHLOROPHENYL)-1,2,3,4-OXATRIAZOLIUM *See*: GEA 3162		
	3-AMINO-2,4-DICYANO-5-(4-HYDROXYPHENYL)PENTA-2,4-DIENONITRILE *See*: Tyrphostin A48		
158857 0°C	**(±)-3-AMINO-2,3-DIHYDROBENZOIC ACID** [59556-17-1] (Gabaculine HCl) **Hydrochloride** An irreversible potent inhibitor of γ-aminobutyric acid transaminase. **Ref.:** 1. Metcalf, B.W., Biochem. Pharmacol., **28**, 1705 (1979). 2. Loscher, W., Naunyn-Schmiedeberg's Arch. Pharmacol., **315**, 119 (1980). $C_7H_9NO_2 \bullet HCl$ MW 175.6	10 mg 25 mg 50 mg	34.95 80.00 147.00

CATALOG NUMBER			U.S. $
153647 0-5°C	**(±)-2-AMINO-6,7-DIHYDROXY-1,2,3,4-TETRAHYDRONAPHTHALENE** [73304-33-3] (6,7-ADTN HBr) **Hydrobromide** Dopamine agonist $C_{10}H_{13}NO_2 \bullet HBr$ MW 260.2	10 mg 15 mg 25 mg	51.05 72.95 115.70
193503 RT	**4-(2-AMINOETHYL)BENZENE-SULFONYL FLUORIDE** [30827-99-7] **Hydrochloride** (AEBSF) **Purity: 97% (HPLC)** A covalent binding serine protease inhibitor. AEBSF belongs to the family of irreversible sulfonyl fluoride inhibitors that block trypsin and chymotrypsin-type enzymes. Similar in structure to the commonly used inhibitor PMSF, AEBSF offers better solubility in water, lower toxicity, greater stability and higher inhibitory activity. $C_8H_{10}FNO_2S \bullet HCl$ MW 239.7	10 mg 50 mg 100 mg 500 mg 1 g	11.00 31.95 54.50 207.05 300.00
159707 RT	**N-(2-AMINOETHYL)-4-CHLOROBENZAMIDE** [94319-79-6] (Ro 16-6491) **Hydrochloride** A monoamine oxidase-β inhibitor. $C_9H_{11}N_2OCl \bullet HCl$ MW 235.1	10 mg 50 mg 100 mg	13.75 40.10 68.75
158858 0°C	**N-(2-AMINOETHYL)-5-CHLORO-NAPHTHALENE-1-SULFONAMIDE** (A-3) **Purity: 98%** Inhibitor of PKA, PKG, MLCK, and protein kinase C. **Ref.:** Inagaki, M., et.al., Mol. Pharmacol., **29**, 577 (1986). MW 321.2	10 mg 25 mg 50 mg	57.85 137.60 263.70
159709 0-5°C	**N-(2-AMINOETHYL)-3-IODOBENZAMIDE** **Hydrochloride** Reported to be a stronger MAO-β inhibitor than N-(2-Aminoethyl)-4-chlorobenzamide. **Ref.:** Annan and Silverman, J. Med. Chem., **36**, 3968 (1993). $C_9H_{11}N_2OI \bullet HCl$ MW 326.6	1 mg 5 mg 10 mg 25 mg	13.75 52.75 97.45 215.00
158859 0°C	**N-(2-AMINOETHYL)-5-ISOQUINOLINESULFONAMIDE** [84468-17-7] (H-9) **Dihydrochloride** **Purity: 99%** Excellent for chromatographic purification of protein kinases. Protein kinase inhibitor. **Ref.:** 1. Hidaka, H., et.al., Biochemistry, **23**, 5036 (1984). 2. Inagaki, M., et.al., J. Biol. Chem., **260**, 2922 (1985). 3. Wolf, M., et.al., ibid., **260**, 15718 (1985). $C_{11}H_{13}N_3O_2S \bullet 2HCl$ MW 324.3	10 mg 25 mg 50 mg	68.75 157.65 286.65
159710 RT	**2-AMINOETHYLPHOSPHONIC ACID** [2041-14-7] $C_2H_8NO_3P$ MW 125.1	100 mg 250 mg	20.00 33.45
	2-AMINOETHYLSULFINIC ACID *See*: Hypotaurine		
153645 RT	**(±)-p-AMINOGLUTETHIMIDE** [125-84-8] Inhibitor of cytochrome P-450-dependent hydroxylation reactions. $C_{13}H_{16}N_2O_2$ MW 232.3	25 mg 50 mg 100 mg	14.45 23.95 43.35
153643 RT	**R(+)-p-AMINOGLUTETHIMIDE TARTRATE** [57344-88-4] An active enantiomer of p-aminoglutethimide. $C_{13}H_{16}N_2O_2 \bullet C_4H_6O_6$ MW 382.4	15 mg 25 mg 50 mg	25.35 39.80 72.25

CATALOG NUMBER			U.S. $
153644 RT	**S(-)-p-AMINOGLUTETHIMIDE TARTRATE** (S(-)-3-(4-Aminophenyl)-3-ethyl-2,6-piperidine dione tartrate) An enantiomer of p-aminoglutethimide which is less active. $C_{13}H_{16}N_2O_2 \bullet C_4H_6O_6$ MW 382.4	15 mg 25 mg 50 mg	25.35 39.80 72.25
150349 RT	**AMINOGUANIDINE BICARBONATE** [2582-30-1] (Guanylhydrazine bicarbonate) **Crystalline** $CH_6N_4 \bullet H_2CO_3$ MW 136.1	100 g 500 g	9.25 24.00
154186 0-5°C	**N-(6-AMINOHEXYL)-5-CHLORO-1-NAPHTHALENESULFONAMIDE** [61714-27-0] (W7) **Hydrochloride** **Purity: ≥98%** W7 is a vascular relaxing agent which affects vascular smooth muscle actomyosin. W7 is also a calmodulin antagonist that binds to calmodulin and inhibits Ca^{2+} calmodulin-regulated enzyme activities. $C_{16}H_{21}ClN_2O_2S \bullet HCl$ MW 377.3	25 mg 100 mg 250 mg	25.40 82.25 167.00
154743 0-5°C	**N-(6-AMINOHEXYL)-5-CHLORO-2-NAPHTHALENESULFONAMIDE** [69762-85-2] **Hydrochloride** A calmodulin antagonist **Ref.:** Hidaka, H., et al., Proc. Nat. Acad. Sci. USA, **78,** 4354 (1981). $C_{16}H_{21}ClN_2O_2S \bullet HCl$ MW 377.3	1 mg 5 mg 10 mg	55.25 148.50 267.80
154744 0-5°C	**N-(6-AMINOHEXYL)-1-NAPHTHALENESULFONAMIDE** [61714-25-8] (W5) **Hydrochloride** Reported to be a calmodulin antagonist. **Ref.:** Hidaka, H., et al., Proc Nat. Acad. Sci. USA, **78,** 4354 (1981). $C_{16}H_{22}N_2O_2S \bullet HCl$ MW 342.9	1 mg 5 mg	45.95 180.80
154745 0-5°C	**N-(6-AMINOHEXYL)-2-NAPHTHALENESULFONAMIDE** [35517-14-7] **Hydrochloride** **Ref.:** Hidaka, H., et al., Proc Nat. Acad. Sci. USA, **78,** 4354 (1981). $C_{16}H_{22}N_2O_2S \bullet HCl$ MW 342.9	1 mg 5 mg	34.90 138.70
	4-AMINO-5-HEXYNOIC ACID *See*: γ-Acetylenic GABA		
159712 RT	**(±)-α-AMINO-3-HYDROXY-5-METHYL-ISOXAZOLE-4-PROPIONIC ACID** (AMPA) **Dihydrate** Selective quisqualate-like agonist. $C_7H_{10}N_2O_4 \bullet H_2O$ MW 220.2	1 mg 5 mg 10 mg	33.85 137.60 258.00
154747 0-5°C	**(±)-α-AMINO-3-HYDROXY-5-METHYL-ISOXAZOLE-4-PROPIONIC ACID** [118896-96-1] (AMPA) **Hydrobromide** Potent quisqualate-like agonist **Ref.:** 1. Krogsgaard-Larsen, P., et al., Nature (London), **284,** 64 (1980). 2. Honore, T., et al., J. Neurochem., **38**, 173 (1982). $C_7H_{10}N_2O_4 \bullet HBr$ MW 267.1	1 mg 5 mg 10 mg	43.25 189.20 344.00
158860 RT	**7-AMINOKETANSERIN** (R 63234) **Purity: 99%** Affinity ligand for 5-HT and histamine receptors. **Ref.:** 1. Wouters, W., et.al., Biochem. Pharmacol., **35**, 3199 (1986). 2. Wouters, W., et.al., FEBS, **182**, 291 (1985). 3. Wouters, W., et.al., J. Biol. Chem., **260**, 8423 (1985). MW 410.4	25 mg 50 mg	321.05 584.75
159713 -20°C	**AMINOMALONIC ACID** [1068-84-4] $C_3H_5NO_4$ MW 119.1	1 mg 5 mg 25 mg	13.75 38.95 155.90
195935 -20°C	**2′-AMINO-3′-METHOXYFLAVONE** (PD 98059) **Purity: >95%** MAP kinase activation inhibitor. Inhibits cell growth and reverses the phenotype of *ras*-transformed BalB 3T3 fibroblasts. $C_{16}H_{13}NO_3$ MW 267.3	1 mg 5 mg	26.25 99.75
154187 0-5°C	**α-AMINO-β-METHYLAMINO-PROPIONIC ACID** **Hydrochloride** mp 165-167°C **Purity ≥98%** An amino acid isolated from the seeds of *Cycas Circinalis* that is neurotoxic to higher animals. $C_4H_{11}O_2N_2 \bullet HCl$ MW 155.5	10 mg 50 mg 100 mg	27.00 94.70 159.80
196027 RT	**4-AMINO-1,8-NAPHTHALIMIDE** [1742-95-6] (PARP Inhibitor) **Purity: ≥96%** Reduces ischemia-reperfusion injury in the heart and skeletal muscles. MW 212.2	5 mg 25 mg	21.00 78.75
195709 -20°C	**1,2-*bis*(o-AMINOPHENOXY)ETHANE-N,N,N′,N′-TETRAACETIC ACID TETRAACETOXYMETHYL ESTER** [126150-97-8] (BAPTA-AM) **Purity: >90%** A cell permeable derivative of BAPTA widely used as an intracellular calcium sponge. $C_{34}H_{40}N_2O_{18}$ MW 764.7	25 mg	136.50
158861 RT	**D-(-)-2-AMINO-4-PHOSPHONO-BUTYRIC ACID** [78739-01-2] (D-(-)-2-Amino-4-phosphono-butanoic acid; D-AP4) **Purity: 98%** NMDA antagonist. **Ref.:** Davies, J. and Watkins, J.C., Brain Res., **235**, 378 (1982). $C_4H_{10}NO_5P$ MW 183.1	1 mg 5 mg	30.00 123.90
158862 RT	**L-(+)-2-AMINO-4-PHOSPHONO-BUTYRIC ACID** [23052-81-5] (L-(+)-2-Amino-4-phosphono-butanoic acid; L-AP4) **Purity: 99%** NMDA agonist and synaptic depressant. **Ref.:** 1. Davies, J. and Watkins, J.C., Brain Res., **235**, 378 (1982). 2. Koerner, J.F. and Cotman, C.W., Brain Res., **216**, 192 (1981). $C_4H_{10}NO_5P$ MW 183.1	1 mg 5 mg	49.30 114.80
153641 RT	**(±)-2-AMINO-4-PHOSPHONO-BUTYRIC ACID** [20263-07-4] (DL-2-Amino-4-phosphono-butanoic acid; AP-4) **Purity: 99%** $C_4H_{10}NO_5P$ MW 183.1	25 mg 50 mg 100 mg	26.10 46.30 86.75

Neuroscience

CATALOG NUMBER			U.S. $
26023 **0-5°C**	**L-(+)-AMINO-4-PHOSPHONO-BUTYRIC ACID, [2,3-^{3}H]** (AP 4) Sp. Act. 40-60 Ci/mmol 1.48-2.22 TBq/mmol Ethanol:water (1:1) Shipped in dry ice. *Please call for delivery information.* MW 183.1	250 µCi 1 mCi	1091.35 2060.45
153640 **0-5°C**	**(±)-2-AMINO-7-PHOSPHONO-HEPTANOIC ACID** [85797-13-3] (AP-7) NMDA antagonist $C_7H_{16}NO_5P$ MW 225.2	2 mg 5 mg 10 mg	31.80 62.20 115.70
158863 **RT**	**D-(-)-2-AMINO-5-PHOSPHONO-PENTANOIC ACID** [79055-68-8] (D-(-)-2-Amino-5-phosphono-valeric acid; D-AP5) **Purity: 99%** Active form of AP5, and a competitive NMDA antagonist. **Ref.:** 1. Watkins, J.C., et.al., Ann. Rev. Pharmacol. Toxicol., **21**, 165 (1981). 2. Hansen, J.J. and Krogsgaard-Larsen, P., Med. Res. Rev., **10**, 55 (1990). $C_5H_{12}NO_5P$ MW 197.1	1 mg	49.30
158864 **RT**	**L-(+)-2-AMINO-5-PHOSPHONO-PENTANOIC ACID** [79055-67-7] (L-(+)-2-Amino-5-phosphono-valeric acid; L-AP5) **Purity: 99%** Less active form than AP5. **Ref.:** 1. Watkins, J.C., et.al., Ann. Rev. Pharmacol. Toxicol., **21**, 165 (1981). 2. Hansen, J.J. and Krogsgaard-Larsen, P., Med. Res. Rev., **10**, 55 (1990). $C_5H_{12}NO_5P$ MW 197.1	1 mg 5 mg	36.40 131.90
153639 **RT**	**(±)-2-AMINO-5-PHOSPHONO-PENTANOIC ACID** [76326-31-3] (AP-5; DL-2-Amino-5-phosphono-valeric acid) Potent NMDA antagonist $C_5H_{12}NO_5P$ MW 197.04	2 mg 5 mg 10 mg	23.15 30.00 51.00
26054 **0-5°C**	**D-(-)-AMINO-5-PHOSPHONO-PENTANOIC ACID, [4,5-^{3}H]** (AP 5) Sp. Act. 20-40 Ci/mmol 0.74-1.48 TBq/mmol Ethanol:water (1:1) Shipped in dry ice. *Please call for delivery information.* MW 197.13	250 µCi 1 mCi	842.85 1758.50
159720 **RT**	**N-(3-AMINOPROPYL)-CYCLOHEXANAMINE** [3312-60-5] **Dihydrochloride** Inhibitor of spermine and spermidine synthases. **Ref.:** Chu, et al., Eur. J. Pharm., **256**, 155 (1994). $C_9H_{20}N_2$ • 2HCl MW 229.2	1 mg 5 mg 25 mg	13.75 42.40 169.70
159862 **RT**	**2-AMINOPURINE** [452-06-2] (2-AP) **Purity: 98%** Selective protein kinase inhibitor active on p58 PITSLREβ1 (a p34^{cdc2}-related protein kinase) which may be used to override multiple cell cycle checkpoints and drug-induced cell cycle blocks. **Ref.:** 1. Andreassen, P.R. and Margolis, R.L., *Proc. Natl. Acad. Sci. USA*, **89**, 2272 (1992). 2. Xiang, J., et al., *Biochem. Biophys. Res. Commun.*, **199**, 1167 (1994). $C_5H_5N_5$ MW 135.1	25 mg 100 mg 250 mg 500 mg	10.10 52.95 109.00 204.00
150366 **RT**	**4-AMINOPYRIDINE** [504-24-5] **Purity: ~98%** Pink to red crystals $C_5H_6N_2$ MW 94.1	5 g 10 g 25 g 100 g	5.00 7.60 15.25 52.45
154198 **0-5°C**	**9-AMINO-1,2,3,4-TETRAHYDROACRIDINE** [1684-40-8] (Tacrine HCl; THA) **Hydrochloride Hydrate** **Purity: ≥98%** A potent centrally acting anticholinesterase for therapy of memory deficits in patients with Alzheimers's disease. THA also selectively blocks potassium channels in the central nervous system, which results in an increased release of acetylcholine and a prolongation of the action potential of the presynaptic cholinergic neurons. $C_{13}H_{14}N_2$ • HCl • H_2O MW 252.7	1 g 5 g 10 g	16.15 72.00 137.80
150370 **RT**	**5-AMINOVALERIC ACID** [627-95-2] **Crystalline Hydrochloride** A weak $GABA_B$ receptor antagonist. $C_5H_{11}NO_2$ • HCl MW 153.6	1 g 5 g 25 g	7.90 27.95 84.65
153535 **RT**	**AMIODARONE** [1951-25-3] (2-Butyl-3-benzofuranyl)-[4-[2-(diethylamino)ethoxy]-3,5-diiodo-phenyl]-methanone hydrochloride) **Hydrochloride** $C_{25}H_{29}I_2NO_3$ • HCl MW 681.8	250 mg 1 g	21.50 70.85
193612 **RT**	**AMOXAPINE** [14028-44-5] (2-Chloro-11-(1-piperazinyl)-dibenz[b,f][1,4]oxazepine) Inhibitor of norepinephrine uptake in neurons. $C_{17}H_{16}N_3OCl$ MW 313.8	100 mg 500 mg	15.45 63.95
	AMPA *See*: (±)-α-Amino-3-hydroxy-5-methylisoxazole-4-propionic acid		
159014 **RT**	**2-(p-AMYLCINNAMOYL)AMINO-4-CHLOROBENZOIC ACID** (ONO-RS-082) **Purity: 98%** Blocks PLA_2 in human platelets which inhibits epinephrine-stimulated thromboxane production. **Ref.:** Banga, H.S., et.al., Proc. Natl. Acad. Sci. USA, **83**, 9197 (1986). MW 371.9	20 mg 50 mg 100 mg	91.70 212.10 401.30

CATALOG NUMBER			U.S. $
159020 RT	**N-(p-AMYLCINNAMOYL)-ANTHRANILIC ACID** [110683-10-8] (ACA) **Purity: 99%** A close structural analog to ono-rs-082 which is a less potent PLA_2 inhibitor. Also demonstrates some leukotriene antagonistic activity. **Ref.:** 1. Banga, H.S., et.al., Proc. Natl. Acad. Sci. USA, **83**, 9197 (1986). 2. Nakai, H., et.al., J. Med. Chem., **21**, 78 (1986). MW 337.4	50 mg 100 mg 250 mg	74.55 131.90 298.10
159873 -20°C	**(+)-ANATOXIN A** [64314-16-5] (2-Acetyl-9-azabicyclo-[4.2.1]non-2-ene HCl) From *Anabaena flos-aquae* **Hydrochloride** **Purity: 99%** Potent neuronal nicotinic acetylcholine receptor agonist. At high concentrations, it desensitizes the receptor, blocks neuromuscular transmission, and blocks the AChR ion channel. **Ref.:** 1. Thomas, P., et al., *J. Neurochem.*, **60**, 2308 (1993). 2. Swanson, K.L., et al., *Mol. Pharmacol.*, **29**, 250 (1986). 3. Kofuji, P., et al., *J. Pharmacol. Exp. Ther.*, **252**, 517 (1990). $C_{10}H_{15}NO \bullet HCl$ MW 201.5	250 µg	133.00
158866 0°C	**6-ANILINO-5,8-QUINOLINEDIONE** [91300-60-6] (LY 83583) **Purity: 97%** Inhibits nitric oxide induced activation of soluble guanylate cyclase. Also enhances contractile responses of rat aorta and artery to α-adrenoceptor agonists. Blocks leukotriene releases and acetylcholine induced relaxation. Reduces platelet-endothelial cell adhesion. **Ref.:** 1. Mulsch, A., et.al., Naunyn-Schmeidebergʼs Arch. Pharmacol., **340**, 49 (1989). 2. Macleod, K.M., et.al., Mol. Pharmacol., **32**, 59 (1987). 3. Fleisch, J.H., et.al., J. Pharmacol. Exp. Ther., **229**, 681 (1984). $C_{15}H_{10}N_2O_2$ MW 250.3	10 mg 25 mg 50 mg	93.50 214.30 413.00
193613 RT	**ANIRACETAM** [72432-10-1] (Ro 13-5057; 1-(4-Methoxybenzoyl)-2-pyrrolidinone) Reported to increase ion conductance through AMPA receptors, and also involve the cholinergic system. **Ref.:** Toide, Arch. Int. Pharmacodyn., **298**, 25 (1989). $C_{12}H_{13}NO_3$ MW 219.2	10 mg 25 mg	30.00 49.90
159881 -20°C	**ANISOMYCIN** [22862-76-6] (2-[p-Methoxybenzyl]-3,4-pyrrolidinediol 3-acetate) From *Streptomyces griseolus* **Purity: 97%** Activates a restricted subset of kinases currently only identified by p54 and MAP kinase. Study aid for cytoplasmic signals resulting in nuclear signaling and induction of *c-fos* and *c-jun*. **Ref.:** 1. Kavdal, E., et al., *Mol. Cell. Biol.*, **14**, 1066 (1994). $C_{14}H_{19}NO_4$ MW 265.3	10 mg 25 mg 50 mg	29.00 59.60 90.00

CATALOG NUMBER			U.S. $
691542 -20°C	**ANNEXIN I** *MONOCLONAL ANTIBODY* (anti-Lipocortin I; anti-Calpactin II; anti-Chromobindin 9; anti-p35) **Anti-Human** **Clone:** II-29 **Isotype:** mouse IgG_1 **Conc/Titer:** 1:5,000 Applications: Immunoblotting; ELISA; Immunohistochemistry This antibody reacts strongly with annexin I from human or bovine tissue and does not cross-react with other annexins or other proteins in a total lysate of human fibroblasts as determined by Western Blot. It is packaged at a concentration of 1 mg/ml in 50% glycerol, 5 mM TRIS, pH 8.2, 25 mM NaCl, and 1.5 mM sodium azide. **Purity: ≥95%** The hybridoma was elicited to annexin I purified from bovine lung. **Ref.:** 1. Creutz, C.E., et al., *J. Biol. Chem.*, **262**, 1860 (1987). 2. Zokas, L. and Glenney, J.R., *J. Cell. Biol.*, **105**, 2111 (1987).	50 µg	396.90
691552 -20°C	**ANNEXIN II** *MONOCLONAL ANTIBODY* (Anti-Lipocortin II; anti-Calpactin I; anti-p36; anti-Chromobindin 8; anti-Protein I; anti-PAP IV) **Anti-Bovine** **Clone:** CPI-50 **Isotype:** mouse IgG_1 **Conc/Titer:** 1:5,000 Applications: Immunoblotting; ELISA; Immunohistochemistry This antibody reacts strongly with annexin II from human or bovine tissues and does not cross-react with other annexins or other proteins in a total lysate of human fibroblasts as determined by Western Blot. It is packaged at a concentration of 1 mg/ml in 50% glycerol, 5 mM TRIS, pH8.2, 25 mM NaCl, and 1.5 mM sodium azide. **Purity: ≥95%** The hybridoma was elicited to annexin II from bovine lung.	50 µg	391.40
	ANNEXIN II, Light Chain *MONOCLONAL ANTIBODY* **Anti-Human** **Clone:** LC148 **Isotype:** mouse IgG_1 **Conc/Titer:** 1:5,000 Applications: Immunoblotting; ELISA; Immunohistochemistry This is an 11 kDa light chain of annexin II, usually found tightly associated to annexin II (ICN Code No. 69-155-2). Annexin II is a structurally unique member of the annexins family because of this light chain. The other known annexins are monomeric, while annexin II is a heterotetramer consisting of two subunits of each type. The antibody is packaged at a concentration of 1 mg/ml in 50% glycerol, 5 mMTRIS, ph8.2, 25 mM NaCl, and 1.5 mM sodium azide.		
691582		50 µg	275.60
691581		100 µg	452.00

CATALOG NUMBER			U.S. $
691561 -20°C	**ANNEXIN IV** *MONOCLONAL ANTIBODY* (Anti-Calelectrin 32.5 kDa; anti-endoexin I; anti-Protein II; anti-Lipocortin IV; anti-Chromobindin IV; anti-PAP IV; anti-PP4-X; anti-Calcimedin 35β) **Anti-Human** **Clone:** CPIII-16 **Isotype:** mouse IgG_1 **Conc/Titer:** 1:5,000 Applications: Immunoblotting; ELISA; Immunohistochemistry This antibody reacts strongly with annexin IV from human or bovine tissues and does not cross-react with other annexins or other proteins in a total lysate of human fibroblasts as determined by Western Blot. It is packaged at a concentration of 1 mg/ml in 50% glycerol, 5 mM TRIS, pH8.2, 25 mM NaCl, and 1.5 mM sodium azide. **Purity: ≥95%** **Ref.:** 1. Creutz, C.E., et al., *J. Biol. Chem.*, **262**, 1860 (1987). 2. Crompton, M.R., et al., *Cell*, **55**, 1 (1988).	100 µg	282.90
	ANNEXIN VI *MONOCLONAL ANTIBODY* (Anti-Calelectrin 67 kDa; anti-Lipocortin VI; anti-Protein III; anti-Chromobindin 20; anti-Calcimedin 67 kDa; anti-Calphobindin II; anti-p68; anti-p70) **Anti-Human** **Clone:** 73-5-4 **Isotype:** mouse IgG_1 **Conc/Titer:** 1:5,000 Applications: Immunoblotting; ELISA; Immunohistochemistry This antibody reacts strongly with annexin VI from human or bovine tissues and does not cross-react with other annexins or other proteins in a total lysate of human fibroblasts as determined by Western Blot. It is packaged at a concentration of 1 mg/ml in 50% glycerol, 5 mM TRIS, pH8.2, 25 mM NaCl, and 1.5 mM sodium azide. **Purity: ≥95%** The hybridoma was elicited to annexin VI purified from human placenta.		
691572		50 µg	391.40
691571		100 µg	738.65
158867 -20-0°C	**ANTHRYLMETHYL OKADAATE** [157606-35-4] **Purity: ≥98%** (HPLC) A fluorescent derivative of okadaic acid used as a standard in okadaic acid analyis. **Ref.:** Lee, J.S., et.al., Agric. Biol. Chem., **51**, 877 (1987). $C_{59}H_{78}O_{13}$ MW 995.3	10 µg 25 µg 50 µg 100 µg	54.45 108.95 194.95 349.70
152328 0-5°C	**ANTIBIOTIC A23187** [52665-69-7] (Calcium Ionophore A23187) **Free Acid** White crystalline solid. Antibiotic A23187 is an antibiotic which demonstrates weak *in vitro* activity against gram-positive bacteria and fungi. It also has the ability to form stable complexes with divalent cations, increasing their ability to cross biological membranes, thus giving A23187 properties as an ionophore. Its U.V. and fluorescence spectral properties allow this calcium ionophore to be useful as a cytoplasmic free calcium ion probe. A23187 does exhibit toxicity and is a potential health hazard, so caution should be used when handling, in accordance with normal procedures for handling toxic compounds. $C_{29}H_{37}N_3O_6$ MW 523.6	1 mg 5 mg 10 mg	20.85 52.50 83.25
152329 0-5°C	**ANTIBIOTIC A23187** **Mixed Calcium-Magnesium Salt** $C_{29}H_{37}N_3O_6$ MW 523.6 (free acid)	1 mg 5 mg 10 mg	17.15 44.20 80.40

CATALOG NUMBER			U.S. $
152843 -20-0°C	**ANTIPAIN** [37691-11-5] ([(S)-1-Carboxy-2-phenylethyl]-carbamoyl-Arg-Val-Arg-al) **Source/Species:** Microbial Inhibitor for trypsin, papain, and cathepsins A and B. **Ref:** 1. Suda, H., et al., J. Antibiot., **25**, 263 (1972); 2. Umezawa, H., et al., J. Antibiot., **25**, 267 (1972); 3. Ikezawa, H., et al., J. Antibiot., **25**, 738 (1972). $C_{27}H_{44}N_{10}O_6$ MW 604.7	1 mg 5 mg 25 mg	13.75 45.00 160.00
198585 -20-0°C	**ANTIPAIN** [37682-72-7] ([(S)-1-Carboxy-2-phenylethyl]-carbamoyl-Arg-Val-Arg-al) **Hydrochloride** **Source/Species:** Microbial Inhibitor for trypsin, papain, and cathepsins A and B. **Ref:** 1. Suda, H., et al., J. Antibiot., **25**, 263 (1972); 2. Umezawa, H., et al., J. Antibiot., **25**, 267 (1972); 3. Ikezawa, H., et al., J. Antibiot., **25**, 738 (1972). $C_{27}H_{44}N_{10}O_6 \bullet HCl$ MW 641.2	1 mg 5 mg 25 mg 100 mg	8.50 19.00 47.50 150.00
190153 -20°C	**APAMIN** [24345-16-2] Bee Venom **Research Grade** Cys-Asn-Cys-Lys-Ala-Pro-Glu-Thr-Ala-Leu-Cys-Ala-Arg-Cys-Gln-Gln-His-NH_2. S-S bridge between Cys_1-Cys_{11} and Cys_3-Cys_{17}. **Ref.:** Habermann, E., (1972), Science, **177**, 314-22; Gauldie, J., et. al., (1976), Eur. J. Biochem., **61**, 369-76. MW 2027.3	0.5 mg 1 mg	75.30 135.65
159883 -20°C	**APHIDICOLIN** [38966-21-1] From *Nigrospora sphaerica* **Purity: 98%** Inhibits the early S-phase of the cell cycle. DNA polymerase α and δ reversible inhibitor. **Ref.:** 1. Levenson, V. and Hamlin, J.L., *Nucleic Acids Res.*, **21**, 3997 (1994). 2. O'Dwyer, P.J., et al., *Cancer Res.*, **54**, 724 (1994). $C_{20}H_{34}O_4$ MW 338.5	1 mg 5 mg 10 mg	56.45 223.65 403.05
153635 0-5°C	**R(-)-APOCODEINE** [641-36-1] (R(-)-10-methoxy-11-hydroxyaporphine) **Hydrochloride** Dopamine receptor agonist. Off-white, photosensitive solid; mp 260-264°C. Store tightly sealed at 4 °C, away from light. Soluble in water; soluble in alcohol. $C_{18}H_{19}NO_2 \bullet HCl$ MW 317.7	25 mg 50 mg 100 mg	45.50 74.40 131.00
153634 0-5°C	**R(-)-APOMORPHINE** [314-19-2] ((-)-APO HCl; R(-)-10,11-dihydroxyaporphine) **Hydrochloride** Dopamine receptor agonist. $C_{17}H_{17}NO_2 \bullet HCl$ MW 303.7	25 mg 50 mg 100 mg	11.55 17.35 28.85
153633 -20-0°C	**S(+)-APOMORPHINE** [41035-30-7] (S(+)-10,11-dihydroxyaporphine) **Hydrochloride** Dopamine receptor antagonist (inactive as an agonist). $C_{17}H_{17}NO_2 \bullet HCl$ MW 303.7	1 mg 2 mg 5 mg	67.60 112.35 246.55

CATALOG NUMBER			U.S. $
190382	**APROTININ**	10 mg	50.65
0-5°C	[9087-70-1]	50 mg	139.05
	From Bovine Lung		
	Analytical Grade		
	Lyophilized white powder		
	Activity: Approx. 6000 Kallikrein-inhibitor-units per mg (KIU).		
	Unit Definition: One KIU (Kallikrein Inactivating Unit) is identical to the quantity of protease inhibitor that has the ability to inhibit 2 Kallikrein units by 50% under optimal conditions.		
	Ref.: Kunitz, M. and Northrup, J.H., Gen. Physiol., **19**, 991 (1966)		
	MW ~ 6500		
191158	**APROTININ**	1 mg	9.15
0-5°C	[9087-70-1]	5 mg	27.70
	From Bovine Lung	10 mg	39.80
	Lyophilized white powder	25 mg	90.00
	Activity: 3-4 Inhibitor units/mg of dry weight. One Inhibitor unit = 1500 KIU.	100 mg	277.85
		250 mg	610.50
194559	**APROTININ**	10 mg	57.30
0-5°C	[9087-70-1]	25 mg	130.70
	Cell Culture Reagent	100 mg	403.10
	From Bovine Lung	250 mg	958.60
	Lyophilized white powder		
	Activity: 3-4 Inhibitor units/mg of dry weight. One Inhibitor unit = 1500 KIU.		
150384	**ARACHIDONIC ACID**	10 mg	13.30
0°C	[506-32-1]	50 mg	36.60
	Purity: ≥98%	100 mg	58.80
	Clear, colorless liquid which may develop a yellowish cast.	500 mg	112.00
	Activates protein kinase C	1 g	204.00
	$C_{20}H_{32}O_2$ MW 304.5		
194625	**ARACHIDONIC ACID**	10 mg	17.90
0°C	[506-32-1]	50 mg	50.10
	Cell Culture Reagent	100 mg	82.35
	Purity: 99%	500 mg	200.30
	Clear, colorless liquid which may develop a yellowish cast.		
	$C_{20}H_{32}O_2$ MW 304.5		
159884	**ARACHIDONIC ACID**	5 mg	63.05
-20°C	**TRIFLUOROMETHYLKETONE**	10 mg	105.50
	[149301-79-1]	25 mg	235.05
	($AACOCF_3$)		
	Purity: 98%		
	Arachidonic acid analog which selectively inhibits human cytosolic phospholipase A_2.		
	Ref.: 1. Street, J.P., et al., *Biochemistry*, **32**, 5935 (1993); 2. Bartoli, F., et al., *J. Biol. Chem.*, **269**, 15625 (1994).		
	$C_{21}H_{31}OF_3$ MW 356.5		
154794	**ARCAINE**	50 mg	48.50
RT	[36587-93-6]	250 mg	189.65
	(1,4-Diguanidinobutane)		
	Sulfate Salt		
	Crystalline		
	NMDA antagonist		
	$C_6H_{18}N_6$ MW 270.3		
100728	**ARECOLINE**	5 g	18.00
RT	[300-08-3]	10 g	31.00
	Hydrobromide	50 g	132.00
	Crystalline		
	Increases levels of acetylcholine in the brain.		
	$C_8H_{13}NO_2 \bullet HBr$ MW 236.1		
191238	**D-ARGININE**	1 g	28.45
-20-0°C	[157-06-2]	5 g	103.60
	Free Base		
	$C_6H_{14}N_4O_2$ MW 174.20		
100736	**L-ARGININE**	100 g	17.45
RT	[74-79-3]	500 g	55.90
	Free Base	1 kg	93.15
	Crystalline		
	Purity: 99%		
	$C_6H_{14}N_4O_2$ MW 174.2		

CATALOG NUMBER			U.S. $
194626	**L-ARGININE**	25 g	7.90
RT	[74-79-3]	100 g	21.30
	Cell Culture Reagent	500 g	69.60
	Free Base		
	Purity: 99%		
	$C_6H_{14}N_4O_2$ MW 174.2		
159019	**ARISTOLOCHIC ACID**	50 mg	40.00
RT	[313-67-7]	100 mg	75.40
	From *Aristolochiaceae*	250 mg	178.50
	Purity: 97%		
	1:1 mixture of aristolochic acids I and II. A phenanthrene carboxylic acid derivative which irreversibly blocks phospholipase A_2 from various sources.		
	Ref.: 1. Vishwanath, B.S., et.al., Toxicon, **25**, 501, 929, 939 (1987). 2. Vishwanath, B.S., et.al., Inflammation, **12**, 549 (1988). 3. Rosenthal, M.D., et.al., Biochem. Biophys. Acta, **1001**, 3 (1989).		
	MW 341.3		
159018	**ARISTOLOCHIC ACID**	50 mg	35.00
RT	**Sodium Salt**	100 mg	65.00
	Purity: 97%	250 mg	142.50
	1:1 mixture of aristolochic acid I and aristolochic acid II.		
	MW 363.2		
159886	**ASTEMIZOLE**	100 mg	18.00
RT	[68844-77-9]	500 mg	70.00
	(1-[(4-Fluorophenyl)methyl]-N-[1-[2-(4-methoxyphenyl)ethyl]-4-piperidinyl]-1H-benzimidazol-2-amine)	1 g	124.00
	Purity: 99%		
	Selective antagonist for the histamine H_1 receptor.		
	Ref.: 1. Laduron, P.M., et al., *Mol. Pharmacol.*, **21**, 294 (1982). 2. Richards, D.M., et al., *Drugs*, **28**, 38 (1984).		
	$C_{28}H_{31}FN_4O$ MW 458.6		
153961	**AURANOFIN**	100 mg	49.20
RT	(S-Triethylphosphine	250 mg	102.40
	gold(I)-2,3,4,6-tetra-O-acetyl-1-thio-β-D-glucopyranoside)	500 mg	170.80
	MW 678.27	1 g	284.55
158869	**AUSTRALINE**	1 mg	63.05
0-5°C	([(1R, 2R, 3R, 7S, 7R)-3-hydroxymethyl-1,2,7-trihydroxypyrrolizidine])		
	Purity: 99%		
	Inhibitor of amyloglucosidase and glucosidase I (more selective over glucosidase II).		
	Ref.: Molyneux, R.J., et.al., J. Nat. Prod., **51**, 1198 (1988)		
	MW 189		
193614	**AUTOCAMTIDE-2**	500 µg	55.00
-20°C	Lys-Lys-Ala-Leu-Arg-Arg-Gln-Glu-Thr-Val-Asp-Ala-Leu	1 mg	93.60
	Purity: >97%		
	Very selective CAMKII substrate which exhibits no activity towards PKA.		
	Ref.: Hanson, P.I., et al., Neuron, **3**, 59 (1989).		
	MW 1526.9		
154260	**(±)-13-AZAPROSTANOIC ACID**	1 mg	57.00
-20°C	**Purity: 98%**		
	Crystalline		
	13-APA antagonizes the actions of thromboxane A_2.		
	Binding to the platelet TXA_2/PGH_2 receptor is stereospecific and reversible.		
	MW 311.5		
191364	**AZATHIOPRINE**	100 mg	9.00
0°C	[446-86-6]	250 mg	14.35
	(6-[(1-Methyl-4-nitroimidazol-5-yl)-thio] purine)	1 g	44.00
	Crystalline	5 g	171.30
	Immunosuppresive and cytostatic agent.		
	$C_9H_7N_7O_2S$ MW 277.3		

CATALOG NUMBER			U.S. $
153632 **0-5°C**	**(R)-2-AZIDO-N^6-p-HYDROXY-PHENYLISOPROPYLADENOSINE** [98897-11-1] [(R)AHPIA] Photoaffinity ligand for the A_1 Adenosine receptor. $C_{19}H_{22}N_8O_5$ MW 442.4	2 mg 5 mg 10 mg	36.15 65.10 115.70
158870 **RT**	**7-AZIDOKETANSERIN** (R 63836) **Purity: 99%** Photoaffinity probe for 5-HT and histamine receptors. **Ref.:** 1. Wouters, W., et.al., FEBS, **182**, 291 (1985). 2. Wouters, W., et.al., J. Biol. Chem., **260**, 8423 (1985). MW 436.4	25 mg 50 mg	321.05 584.75

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159793 **0-5°C**	**BACCATINE III** [27548-93-2] Starting material for taxol derivatives. **Ref.:** Wheeler, N.C., J. Natl. Prod., **55**, 432 (1992). $C_{31}H_{38}O_{11}$ MW 586.6	1 mg 5 mg 10 mg	21.95 73.15 135.00
159794 **0-5°C**	**BACCATINE III-7,13-DIACETATE** Distinguishes between mammalian and amoebic microtubules. **Ref.:** Lataste, H., et al., Proc. Natl. Acad. Sci. USA, **81**, 4090 (1984). $C_{35}H_{42}O_{13}$ MW 670.7	5 mg	166.95
153629 **RT**	**(±)-BACLOFEN** [1134-47-0] ((±)-β-(Aminoethyl)-4-chlorobenzenepropanoic acid) White solid; mp 192-193°C. Store tightly sealed. Soluble in water, dilute acid and base. $C_{10}H_{12}NO_2Cl$ MW 213.7	100 mg 500 mg	11.00 16.00
16030 **0-5°C**	**(-)-BACLOFEN, [Butyl-4-^{14}C(U)]** Sp. Act. 50-60 mCi/mmol 1.85-2.22 GBq/mmol Ethanol:water (7:3). *Please call for delivery information.* *p*-$ClC_6H_5CH(CH_2CO_2H)CH_2NH_2$ MW 213.67	50 µCi	1308.55
26024 **0-5°C**	**(-)-BACLOFEN, [Butyl-4-^{3}H]** Sp. Act. 30-60 Ci/mmol 1.11-2.22 TBq/mmol Ethanol:water (7:3). *Please call for delivery information.* *p*-$ClC_6H_5CH(CH_2CO_2H)CH_2NH_2$	250 µCi	787.10
159555 **0°C**	**BAFILOMYCIN A_1** [88899-55-2] From *Streptomyces griseus* **Purity: ~90%** ATPase inhibitor. $C_{35}H_{58}O_9$ MW 622.8	10 µg 25 µg	88.90 183.45
159067 **0°C**	**BAICALEIN** [491-67-8] (5,6,7-Trihydroxyflavone) **Purity: 98%** Specifically inhibits 12-lipoxygenase and leukotriene biosynthesis. **Ref.:** Kimura, Y., et.al., Biochim. Biophys. Acta, **922**, 278 (1987). $C_{15}H_{10}O_5$ MW 270.2	5 mg 10 mg 50 mg	33.20 60.70 255.00
153628 **0-5°C**	**(±)-BAY K 8644** [98791-67-4] (1,4-Dihydro-2,6-dimethyl-5-nitro-4-[2-(trifluoromethyl)-phenyl]-3-pyridine-carboxylic acid methyl ester) $C_{16}H_{15}F_3N_2O_4$ MW 356.3	1 mg 2 mg 5 mg	30.00 55.00 116.50
154261 **-20°C**	**BENSERAZIDE** [14919-77-8] **Hydrochloride** Tan solid $C_{10}H_{15}N_3O_5 \bullet HCl$ MW 293.7	100 mg 500 mg	53.00 238.00
159795 **RT**	**BENZAMIL** [2898-76-2] (Benzylamiloride hydrochloride) **Hydrochloride** Potent Na^+-channel blocker. $C_{13}H_{14}N_7OCl \bullet HCl$ MW 356.2	1 mg 5 mg 25 mg	6.95 13.00 56.50
150433 **0°C**	**(±)-BENZETIMIDE** (3-phenyl-3-[1-(phenylmethyl)-4-piperidinyl]-2 . 6- piperidinedione; R4929) **Hydrochloride** **Ref.:** (1) Resolution of isomers and pharmacology: van Wijngaarden, Life Sci., **8**, 517 (1969); (2) van Wijngaarden, Soudijn, Life Sci., **7**, 225 (1968).	5 mg 10 mg 25 mg	11.75 48.10 49.90
159724 **RT**	**BENZOQUINONIUM DIBROMIDE** [311-09-1] Nicotinic antagonist that blocks ganglion. $C_{34}H_{50}N_4O_2Br_2$ MW 706.6	1 mg 5 mg 10 mg	21.20 84.85 155.90
151443 **RT**	**BENZOTRIPT** [39544-74-6] (N-[4-chlorobenzoyl]-L-tryptophan) Selective cholecystokinin antagonist; gastrin receptor antagonist. **Ref.:** Magous, et al., Regul. Pept., **7**, 233 (1983). $C_{18}H_{15}N_2O_3Cl$ MW 342.8	100 mg 500 mg	122.50 340.05
153626 **RT**	**BENZTROPINE MESYLATE** [132-17-2] (3-(Diphenylmethoxy)-8-methyl-8-azabicyclo[3.2.1]octane methane sulfonate) **Crystalline** Muscarinic receptor antagonist. $C_{22}H_{29}NO_4S$ MW 403.5	25 mg 100 mg	10.10 28.85
150449 **0°C**	**N^6-BENZYLADENOSINE** [4294-16-0] (6-Benzylaminopurine riboside) **Crystalline** An A_1 Adenosine receptor agonist. $C_{17}H_{19}N_5O_4$ MW 357.4	100 mg 250 mg	9.95 18.00
	N-BENZYL-3,4-DIHYDROXY-α-CYANOCINNAMIDE *See*: Tyrphostin B42		
193615 **0-5°C**	**N^6-BENZYL-5′-N-ETHYLCARBOXAMIDOADENOSINE** (N^6-Benzyl-NECA) An A_3 Adenosine receptor agonist. **Ref.:** Gallo-Rodriquez, et al., J. Med. Chem., **37**, 636 (1994). $C_{19}H_{22}N_6O_4$ MW 398.4	1 mg 5 mg	22.05 82.70
	1-BENZYL-1-METHYL-4-CYCLOPENTYLMETHOXY-CARBONYLPIPERIDINIUM BROMIDE *See*: BMCP		
104861 **RT**	**BENZYLOXYAMINE** [2687-43-6] (O-Benzylhydroxylamine) **Hydrochloride** **Crystalline** Dopamine β-hydroxylase inhibitor. Derivatizing reagent for GLC analysis of ketosteroids. $C_7H_9NO \bullet HCl$ MW 159.6	1 g 5 g 25 g	12.65 30.00 120.00
159893 **RT**	**BENZYLPHOSPHONIC ACID** [6881-57-8] **Purity: 98%** Structural mimic of phosphotyrosine. Inhibits bovine heart tyrosine-protein phosphatase. Not cell permeable. **Ref.:** Zhand, Z.-Y. and Van Etten, R.L., *Arch. Biochem. Biophys.*, **282**, 39 (1990). MW 172.1	50 mg 100 mg 500 mg	17.20 28.65 91.70

CATALOG NUMBER			U.S. $
159894 **-20°C**	**BENZYLPHOSPHONIC ACID-(AM)$_2$** (Benzylphosphonic acid *bis*-acetoxymethyl ester) **Purity: 98%** Cell permeable tyrosine phosphatase inhibitor. MW 316.3	10 mg	103.20
153627 **RT**	**BEPRIDIL** [74764-40-2] **Hydrochloride** A non-selective calcium channel blocker. $C_{24}H_{34}N_2O$ • HCl MW 403	15 mg 25 mg 50 mg	40.00 53.00 94.00
159895 **-20°C**	**E_6 BERBAMINE** **Purity: 98%** A selective and potent cell permeable antagonist of calmodulin. **Ref.:** Hu, Z.-Y., et al., *Biochem. Pharmacol.*, **44**, 1543 (1992). MW 757.8	5 mg 10 mg	80.25 137.60
195857 **RT**	**BERBERINE** [633-65-8] (Natural Yellow 18; C.I. 75160) **Chloride** Apoptosis Inhibitor. $C_{20}H_{18}NO_4Cl$ MW 371.8	1 g 5 g 25 g	10.15 20.00 80.00
152844 **-20-0°C**	**BESTATIN** [58970-76-6] ([(2S,3R)-3-Amino-2-hydroxy-4-phenylbutano yl]-Leu) **Free Acid** Inhibitor for aminopeptidase B and leucine aminopeptidase. **Ref:** Umezawa, H., et al., J. Antibiot., **29**, 97 (1976). $C_{16}H_{24}N_2O_4$ MW 308.4	1 mg 5 mg 10 mg 25 mg	16.95 50.15 83.60 156.50
193616 **RT**	**BETAXOLOL** [63659-19-8] **Hydrochloride** A selective β_1-adrenoceptor antagonist. $C_{18}H_{29}NO_3$ • HCl MW 343.9	5 mg 25 mg	74.95 303.20
198588 **RT**	**BETAXOLOL** [63659-19-8] **Hydrochloride Monohydrate** A selective β_1-adrenoceptor antagonist. $C_{18}H_{29}NO_3$ • HCl • H_2O MW 352.9	5 mg 25 mg	74.95 303.20
190160 **0-5°C**	**BETHANECHOL CHLORIDE** [590-63-6] (Carbamyl-β-methylcholine chloride) Cholinergic receptor agonist $C_7H_{17}N_2O_2Cl$ MW 196.7	5 g 25 g 100 g	19.85 62.00 201.35
195859 **0-5°C**	**BETULINIC ACID** [472-15-1] (3β-Hydroxy-20(29)-lupaene-28-oic acid) **Purity: ≥97%** Selectively inhibits human melanoma in cell culture and in animal models and demonstrates antitumor properties by inducing apoptosis. Possess anti-HIV properties. $C_{30}H_{48}O_3$ MW 456.7	1 mg 5 mg	39.90 152.25
190789 **0°C**	**(+)-BICUCULLINE** [485-49-4] **Crystalline** GABA blocker. $C_{20}H_{17}NO_6$ MW 367.4	100 mg 250 mg 500 mg 1 g	29.10 57.40 109.45 166.40
158872 **0-5°C**	**(-)-BICUCULLINE METHOBROMIDE** [73604-30-5] **Purity: 98%** $GABA_A$ antagonist. **Ref.:** Hill, D.R. and Bowery, N.G., Nature, **290**, 149 (1981) $C_{21}H_{20}NO_6$ • Br MW 462.3	25 mg 100 mg 250 mg	25.25 75.00 179.50
159726 **0-5°C**	**(-)-BICUCULLINE METHOCHLORIDE** [53552-05-9] A water soluble GABA antagonist. $C_{21}H_{20}NO_6Cl$ MW 417.8	5 mg 10 mg 25 mg	20.00 31.00 65.50
16031 **0-5°C**	**(-)-BICUCULLINE METHYLCHLORIDE, [Methyl-^{14}C]** Sp. Act. 50-60 mCi/mmol 1.85-2.22 GBq/mmol Ethanol under nitrogen Shipped in dry ice. *Please call for delivery information.* MW 417.8	50 µCi	969.00
26025 **0-5°C**	**(-)-BICUCULLINE METHYLCHLORIDE, [Methyl-^{3}H]** Sp. Act. 60-90 Ci/mmol 2.22-3.33 TBq/mmol Ethanol under nitrogen Shipped in dry ice. *Please call for delivery information.*	250 µCi 1 mCi	726.45 1939.20
158873 **-20-0°C**	**BIOALLETHRIN** [22431-63-6] (D-trans-Allethrin) **Mixture of isomers** Bioallethrin is a Type I pyrethrin and it mimics Type II pyrethrins on the inhibition of calcineurin (protein phosphatase 2B). It is a more potent inhibitor of calcineurin than allethrin and other Type I pyrethrins. $C_{19}H_{26}O_3$ MW 302.42	25 mg 50 mg	36.40 69.20
194137 **0-5°C**	**BISINDOLYLMALEIMIDE I** [133052-90-1] (GF109203X) **Purity: 98%** **Hydrochloride** Protein Kinase C inhibitor. **Ref.:** Davis, P.D., et al., J. Med. Chem., **35**, 994 (1992). $C_{25}H_{24}N_4O_2$ • HCl MW 449.0	250 µg 1 mg	28.60 85.00
194138 **0-5°C**	**BISINDOLYLMALEIMIDE I** (GF109203X) **Purity: 98%** Highly selective Protein Kinase C inhibitor. **Ref.:** Toullec, D., et al., J. Biol. Chem., **266**, 15771 (1991). $C_{25}H_{24}N_4O_2$ MW 411.5	250 µg 1 mg	66.15 232.00
194139 **0-5°C**	**BISINDOLYLMALEIMIDE II** (2-(1-[2-(1-Methylpyrrolidino)ethyl]-1H-indol-3 -yl-3-(1H-indol-3-yl)maleimide) **Purity: 95%** Potently and selectively inhibits Protein Kinase C. **Ref.:** Toullec, D., et al., J. Biol. Chem., **266**, 15771 (1991). $C_{27}H_{26}N_4O_2$ MW 438.5	250 µg 1 mg	82.70 216.10
196040 **RT**	**BLANKOPHOR** [16470-24-9] (Benzenesulfonic acid, 2,2′-(1,2-ethenediyl)bis[5-[[4-[bis(2-hydroxyet hyl)amino]-6-[(4-sulfophenyl)amino]-1,3,5-tria zin-2-yl]amino]-tetrasodium salt) **Purity: ≥90%** A highly selective fluorescent probe of β-amyloid and amyloid plaque core protein (APCP). It does not fade during prolonged exposure to UV blue exciting light. **Ref.:** Roher, A., et al., Proceed. Nat. Acad. of Sci., **83**, 2662-2666 (1986).	10 ml 25 ml 100 ml	23.10 51.00 181.00
190307 **-20-0°C**	**BOMBESIN** [31362-50-2] (pyroGlu-Gln-Arg-Leu-Gly-Asn-Gln-Trp-Ala-V al-Gly-His-Leu-Met-NH_2) A tetradecapeptide that has biological activities in the central nervous system and gastrointestinal tract; also has thermoregulatory effects. **Ref.:** 1. Bertaccini, G., et al., Br. J. Pharmac., **52**, 219 (1974). 2. Erspamer, V., et al., Br. J. Pharmac., **52**, 227 (1974). 3. Rivier, J.E. and Brown, M.R., Biochemistry, **17**, 1776 (1978). $C_{71}H_{110}N_{24}O_{18}S$ MW 1619.9	1 mg 5 mg	61.00 266.00

CATALOG NUMBER			U.S. $
154608 0°C	**BOROGLYCINE** (Ammonia-carboxyborane) **Purity: >97%** Potent hypocholesterolemic agent. β-Hydroxy-β-methylglutaryl-CoA reductase inhibitor. **Ref.:** I.H. Hall, M.K. Das, F. Harchelroad, Jr., P. Wisian-Neilson, A.T. McPhail and B.F. Spielvogel, J. Pharm. Sci. **70**, 339 (1981). BCH_6NO_2 MW 74.88	5 mg 15 mg	198.50 407.35
154609 0°C	**BOROSARCOSINE** (Boromethylglycine, methylamine-carboxyborane) **Purity: >97%** Dihydrofolate reductase inhibitor, DNA polymerase inhibitor. **Ref.:** I.H. Hall, C.J. Gilbert, A.T. McPhail, K.W. Morse, K. Hassett and B.F. Spielvogel, J. Pharm. Sci., **74**, 755 (1985). $BC_2H_8NO_2$ MW 88.9	5 mg 15 mg	198.50 407.35
193950 -20°C	**BRAIN DERIVED NEUROTROPHIC FACTOR** (BDNF) **Human, Recombinant** **Purity: ≥95%** Produced in *E. coli* A neurotrophin which promotes sensory ganglions and motor neurons survival and differentitation. MW ~28 kDa	5 µg	180.50
159027 -20°C	**BREFELDIN A** [20350-15-6] (γ,4-Dihydroxy-2-[6-hydroxy-1-heptenyl]-4-cyclopentanecrotonic acid λ-lactone; BFA) **Purity: 98%** Blocks binding of the cytosolic coat protein β-COP and ARF to Golgi membranes mediated by protein G. Also blocks protein transportation into post-Golgi compartments. **Ref.:** 1. Donaldson, J.G., et.al., Science, **254**, 1197 (1991). 2. Donaldson, J.G., et.al., J. Cell. Biol., **112**, 579 (1991). 3. Orci, L., et.al. Cell, **64**, 1183 (1991). 4. Lippincott-Schwartz, J., et.al., ibid., **60**, 821 (1990). $C_{16}H_{24}O_4$ MW 280.4	5 mg 25 mg	67.80 268.15
26026 0-5°C	**BREFELDIN A, [^{3}H]** Sp. Act. 15-30 Ci/mmol 0.555-1.11 TBq/mmol Ethanol *Please call for delivery information.* MW 280.37	250 µCi	Enquire
195711 -20-0°C	**BREVETOXIN PbTx-1** [98112-41-5] From *Ptychodiscus brevis* **Purity: ≥95%** Voltage-dependent sodium channel activator. *CAUTION! HIGHLY TOXIC!* MW 866.6	100 µg	382.00
158876 -20-0°C	**BREVETOXIN PbTx-9** From *Ptychodiscus brevis* **Purity: ≥95%** Cyclic polyether which causes contractile paralysis in animal models. Do not use DMSO as a solvent. MW 898.6	10 µg 25 µg 50 µg	116.00 290.00 504.00
153759 0°C	**BROMOACETYL ALPRENOLOL MENTHANE** [76298-90-3] A β-adrenergic antagonist $C_{24}H_{37}BrN_2O_3$ MW 481.5	15 mg 25 mg 50 mg	40.55 72.25 137.45
158877 -20-0°C	**8-BROMOADENOSINE-3′,5′-*cyclic*-MONOPHOSPHATE** [76939-46-3] **Sodium Salt** **Purity: 98%** cAMP analog more resistant to phosphodiesterases than cAMP. Activates cAMP-dependent protein kinase. **Ref.:** 1. Meyer, R.B. and Miller, J.P., Life Sci., **14**, 1019 (1974). 2. Hei, Y.-J., et.al., Mol. Pharmacol., **39**, 223 (1991). 3. Sandberg, M., et.al., Biochem. J., **279**, 521 (1991). $C_{10}H_{10}BrN_5O_6PNa$ MW 430.1	10 mg 25 mg 50 mg 100 mg	40.00 75.00 145.00 276.00
159729 -20-0°C	**BROMOBIMANE** [71418-44-5] Substrate for glutathionetransferase and fluorescent labeling reagent for Thiols. $C_{10}H_{11}N_2O_2Br$ MW 271.1	5 mg 25 mg	21.00 80.50
158878 0°C	**N-[2-(p-BROMOCINNAMYL-AMINO)ETHYL]-5-ISO-QUINOLINESULFONAMIDE** [127243-85-0] (H-89) **Dihydrochloride** **Purity: 99%** Specific and potent inhibitor of PKA. **Ref.:** Nishizuka, Y., Science, **233**, 305 (1986). MW 519.2	5 mg 10 mg 25 mg	68.75 131.90 313.00
	BROMOCONDURITOL *See*: 6-Bromo-4-cyclohexene-1,2,3-triol		
153758 0-5°C	**(+)-BROMOCRIPTINE MESYLATE** [22260-51-1] (2-Bromo-12′-hydroxy-2′-(1-methylethyl)-5′-(2-methylpropyl)ergotaman-3′,6′,18-trione methanesulfonate) **Methanesulfonate Salt** $C_{32}H_{40}N_5O_5Br \bullet CH_4SO_3$ MW 750.7	10 mg 25 mg 100 mg	19.10 27.10 72.50
158879 0-5°C	**6-BROMO-4-CYCLOHEXENE-1,2,3-TRIOL** [42014-74-4] (6-Bromo-3,4,5-trihydroxycyclohex-1-ene; Bromoconduritol) **Purity: 99%** **Mixed isomers** Inhibitor of mammalian α-glucosidase II over α-glucosidase I. **Ref.:** Datema, R., et.al., Proc. Natl. Acad. Sci. USA, **79**, 6787 (1982). $C_6H_9BrO_3$ MW 209	1 mg 5 mg	11.00 48.70
158880 -20-0°C	**8-BROMOGUANOSINE-3′,5′-*cyclic*-MONOPHOSPHATE** [51116-01-9] (8-Bromo-cGMP) **Sodium Salt** **Purity: 96%** Activates cGMP-dependent protein kinase. Inhibitor of thrombin induced arachidonic acid release in human platelets. **Ref.:** 1. Meyer, R.B. and Miller, J.P., Life Sci., **14**, 1019 (1974). 2. Francis, S.G., et.al., ibid., **34**, 506 (1988). 3. Schultz, K.D., et.al., Naunyn-Schmiedeberg's Arch. Pharmacol., **306**, 1 (1979). 4. Sane, D.C., et.al., Biochem. Biophys. Res. Commun., **165**, 708 (1989). $C_{10}H_{10}BrN_5O_7PNa$ MW 446.1	5 mg 10 mg 25 mg	21.90 37.80 87.00
193617 RT	**(RS)-4-BROMOHOMOIBOTENIC ACID** [71366-32-0] A potent AMPA receptor agonist. Unlike AMPA, it also shows affinity for $CaCl_2$-dependent L-glutamate binding sites. **Ref.:** Chung, et al., J. Neurochem., **63**, 133 (1994). $C_6H_7N_2O_4Br$ MW 251.0	1 mg 5 mg 10 mg	24.25 97.00 187.40

CATALOG NUMBER			U.S. $
193620 **-20°C**	**3-BROMO-7-NITROINDAZOLE** [74209-34-0] **Purity: ≥97%** More potent inhibitor of nitric oxide synthase (NOS) than 7-nitroindazole. $C_7H_4N_3O_2Br$ MW 242.0	10 mg 25 mg	52.25 76.00
152407 **0-5°C**	**(+)-p-BROMOTETRAMISOLE** [71461-24-0] ((+)-6(4-bromophenyl)-2,3,5,6-tetrahydroimidazo[2,1-b]thiazole ethanedioate) **Oxalate Salt** **Purity: 99%** An alkaline phosphate inhibitor. Shown to exhibit slightly less potent inhibition than (-)-p-Bromotetramisole make the dextro (+) form ideal for internal control applications. $C_{11}H_{11}BrN_2S \bullet C_2H_2O_4$ MW 373.2	25 mg 100 mg	61.00 224.00
152408 **0-5°C**	**(-)-p-BROMOTETRAMISOLE** [62284-79-1] ((-)-6(4-bromophenyl)-2,3,5,6-tetrahydroimidazo[2,1-b]thiazole ethanedioate; R 30402) **Oxalate Salt** **Purity: 99%** A potent alkaline phosphate inhibitor. (-)-p-Bromotetramisole has been shown to function more effectively in the quantitative determination of intestinal and placental isoenzymes of alkaline phosphatase in human serum than the more commonly used L-phenylalanine. $C_{11}H_{11}BrN_2S \bullet C_2H_2O_4$ MW 373.2	25 mg 100 mg	71.30 177.95
159558 **0°C**	**BRYOSTATIN 1** [83314-1-6] Activates Protein Kinase C. $C_{47}H_{66}O_{16}$ MW 887.0	10 µg	156.00
159559 **0°C**	**BRYOSTATIN 2** [87745-28-6] Binds to and activates Protein Kinase C.	25 µg	395.00
154475 **0-5°C**	**BUCCALIN** [116844-51-0] (Modulatory Neuropeptide) H_2N-Gly-Met-Asp-Ser-Leu-Ala-Phe-Ser-Gly-Gly-Leu-NH_2 **Ref.:** Cropper, E.C., et al., (1988), PNAS, **85**, 6177 MW 1053.3	1 mg 5 mg	72.25 289.20
153761 **RT**	**(+)-BULBOCAPNINE** [632-47-3] **Hydrochloride** Dopamine antagonist $C_{19}H_{19}NO_4 \bullet HCl$ MW 361.8	05 mg 10 mg	25.00 48.00
153762 **RT**	**(+)-BULBOCAPNINE** [298-45-3] Dopamine antagonist $C_{19}H_{19}NO_4$ MW 325.3	10 mg 15 mg 25 mg	63.00 89.25 144.60
154263 **0-5°C**	**BUMETANIDE** [28395-03-1] White micronized solid **Purity: 99%** An inhibitor of sodium and potassium cotransport. $C_{17}H_{20}N_2O_5S$ MW 364	250 mg 1 g 5 g	16.20 46.30 194.75
193621 **-20°C**	**α-BUNGAROTOXIN** [11032-79-4] A neurotoxin that irreversibly binds to post-synaptic cholinergic receptors, producing neuromuscular blockade and skeletal muscle paralysis. Useful as a probe for acetylcholine receptors. Isolated from *Bungarus multicinctus* snake venom. **Ref.:** Mebs, et al., Biochem. Biophys. Res. Comm., **44**, 711 (1971). MW 7907.2	500 µg 1 mg	62.10 116.50
153760 **RT**	**BUPROPION** [31677-93-7] ((±)-1-(3-Chlorophenyl)-2-[(1,1-dimethylethyl)amino]-1-propanone hydrochloride) **Hydrochloride** Dopamine uptake inhibitor $C_{13}H_{18}NOCl \bullet HCl$ MW 276.2	15 mg 25 mg 50 mg	27.10 38.10 70.75
154905 **0-5°C**	**BUSPIRONE** [33386-08-2] (N-[4-(4-[2-Pyrimidinyl]-1-piperazinyl)butyl]-8-azaspiro[4, 5]decane-7, 9-dione) **Hydrochloride** A 5-HT_{1A} Serotonin receptor agonist $C_{21}H_{31}N_5O_2 \bullet HCl$ MW 422	1 g 5 g	35.00 154.00
153623 **RT**	**(+)-BUTACLAMOL** **Hydrochloride** D_1/D_2 Dopamine antagonist $C_{25}H_{31}NO \bullet HCl$ MW 398	5 mg 25 mg 50 mg	34.40 150.00 285.00
158881 **RT**	**4-(3-BUTOXY-4-METHOXYBENZYL)-2-IMIDAZOLIDINONE** [29925-17-5] (Ro 201724) **Purity: 99%** Strong inhibitor of cAMP specific phosphodiesterase. Use in cell culture has been demonstrated with a blood brain barrier model. **Ref.:** 1. Sheppard, H., et.al., Adv. Cyclic Nucleotide Res., **1**, 103 (1972). 2. Reeves, M.L., et.al., Biochem. J., **241**, 535 (1987). 3. Katano, y. and Endoh, M., Biochem. Biophys. Res. Commun., **167**, 123 (1990). 4. Rubin, L.L., et.al., J. Cell Biol., **115**, 1725 (1991). $C_{15}H_{22}N_2O_3$ MW 278.4	100 mg 500 mg	43.00 172.35
153550 **0-5°C**	**t-BUTYL-BICYCLO[2.2.2] PHOSPHOROTHIONATE** [70636-86-1] (TBPS) A $GABA_A$ receptor antagonist, and chloride channel blocker $C_8H_{15}O_3PS$ MW 222.4	1 mg 2 mg	108.45 185.00
193743 **RT**	**3-tert-BUTYL-5-METHOXY-1,2-QUINONE** [2940-63-8] Cytotoxic agent to P388 and KB cells. **Ref.:** Lam, L.K.T., J. Pharm. Sci., **77**, 393-5 (1988). $C_{11}H_{14}O_3$ MW 194.3	10 mg 25 mg 50 mg	29.00 65.00 121.00
195601 **0-5°C**	**BUTYROLACTONE I** (α-oxo-β(p-Hydroxyphenyl)-γ-(p-hydroxy-m-3,3-dimethylallylbenzyl)-γ-methoxycarbonyl-γ-butyrlactone) **Purity: >99%** A selective inhibitor of cdk2 and cdc2 kinase. *DO NOT STERILIZE.* $C_{24}H_{24}O_7$ MW 424	1 mg 5 mg	126.80 527.00

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195680 **-20°C**	**C3 EXOENZYME** From *Clostridium botulinum* Lyophilized Useful for Rho and related protein function analysis including lymphocyte-mediated cytotoxicity, cell motility and thrombin-induced platelet aggregation. It selectively ADP-ribosylates G proteins of low molecular weight.	10 µg	262.50
193745 **0-5°C**	**CAFESTOL** [469-83-0] **From Coffee Beans** A natural extract which induces glutathione S-transferase. **Ref.:** Lam, L.K.T., et al., Cancer Res., **42**, 1193-98 (1982). $C_{20}H_{28}O_3$ MW 316.4	10 mg 25 mg 50 mg 100 mg	30.85 63.95 111.35 192.95

Neuroscience

CATALOG NUMBER			U.S. $
193747 0-5°C	**CAFESTOL PALMITATE** [81760-46-5] A naturally occurring ester present in green coffee beans. **Ref.:** Lam, L.K.T., et al., Cancer Res., **42**, 1193-98 (1982). $C_{36}H_{58}O_4$ MW 554.4	10 mg 25 mg 50 mg 100 mg	32.00 70.00 135.00 250.00
104797 RT	**CAFFEIC ACID** [331-39-5] (3,4-Dihydroxycinnamic acid) Yellowish-brown crystals $C_9H_8O_4$ MW 180.2	1 g 5 g 25 g	7.40 18.00 62.15
195860 -20°C	**CAFFEIC ACID PHENETHYL ESTER** [104594-70-9] (CAPE) **Purity: ≥97%** Active component of propolis from honeybee hives. Possesses anti-viral, anti-inflammatory and immunomodulary properties. Inhibits growth of several types of transformed cells and induces apoptosis in cloned rat embryo fibroblast (CREF) cells. $C_{17}H_{16}O_4$ MW 284.3	1 mg 5 mg	10.50 40.85
101194 RT	**CAFFEINE** [58-08-2] (1,3,7-Trimethylxanthine) **Monohydrate** Protects against virus induction and chemical carcinogenesis. **Ref.:** Rothwell, K., (1974), Nature, **252**, 69-70; Yosh-Kura, H., (1974), Nature, **252**, 71. $C_8H_{10}N_4O_2 \bullet H_2O$ MW 212.2	100 g 250 g 500 g 1 kg	8.15 17.50 29.80 49.65
150114 RT	**CAFFEINE** [58-08-2] (1,3,7-Trimethylxanthine) **Anhydrous** $C_8H_{10}N_4O_2$ MW 194.2	100 g 250 g 500 g 1 kg	13.95 27.90 46.50 77.40
150545 0°C	**CALCINEURIN** (Calmodulin binding protein) (Modulator binding protein) **From Bovine Brain** Lyophilized powder containing approx. 1% protein (Lowry) the balance primarily buffers, salts and stabilizers. **Unit Definition:** One unit will cause 50% inhibition of the activated phosphodiesterase 3′-5′ cyclic nucleotide activity when assayed in two units of activator and 0.1 mM Ca^{2+} in an enzyme coupled system.	50 U 100 U	171.00 332.00
190074 RT	**CALMIDAZOLIUM** [57265-65-3] (Compound R24571, [1-*bis*-p-chlorophenyl) methyl]-3-[2,4-dichloro-β-(2,4-dichlorobenzyl oxy) phenyl]-imidazolium chloride) Calmidazolium inhibits the Ca^{2+} calmodulin dependent PDE. Approx. 500 times more powerful than trifluoperazine. **Ref.:** Van Belle, H. (1981) in "Cell Calcium" 2, 483-494. $C_{31}H_{23}Cl_7N_2O$ MW 687.7	5 mg 10 mg 25 mg	40.00 70.00 163.00
195691 -20°C	**CALMODULIN** [73298-54-1] (Phosphodiesterase 3,5′-*cyclic*-Nucleotide Activator) **From Bovine Brain** **Purity: ≥99%** Lyophilized with 1.7 mM HEPES, pH7, 30 μM $CaCl_2$ **Activity:** 13,000 units/mg **Unit Definition:** one unit will activate 3′,5′-*cyclic*-nucleotide phosphodiesterase to 50% Vmax. It may be used to activate CaM-dependent phosphodiesterase, calcineurin, CaM Kinases, etc. MW 16.7 kDa	1 mg	154.00

CATALOG NUMBER			U.S. $
195692 -20°C	**CALMODULIN** [73298-54-1] (Phosphodiesterase 3,5′-*cyclic*-Nucleotide Activator) **From Bovine Brain** **Purity: ≥98%** Lyophilized virtually salt free. **Activity:** >40,000 units/mg **Unit Definition:** one unit will activate 0.016 units of 3′,5′-*cyclic*-nucleotide phosphodiesterase to 50% Vmax when saturated with activator in the presence of 0.01mM Ca^{2+}. It may be used to activate CaM-dependent phosphodiesterase, calcineurin, CaM Kinases, etc.	1 KU 5 KU 25 KU 100 KU	13.65 21.00 92.00 350.00
195696 -20°C	**CALMODULIN** [77107-46-1] (Phosphodiesterase 3,5′-*cyclic*-Nucleotide Activator) **From Porcine Brain** **Purity: ≥95%** Lyophilized virtually salt free. **Activity:** >40,000 units/mg **Unit Definition:** one unit will activate 0.016 units of 3′,5′-*cyclic*-nucleotide phosphodiesterase to 50% Vmax when saturated with activator in the presence of 0.01mM Ca^{2+}. It may be used to activate CaM-dependent phosphodiesterase, calcineurin, CaM Kinases, etc.	1 KU 5 KU 25 KU	10.50 21.35 56.60
195894 0-5°C	**CALMODULIN** (Phosphodiesterase 3,5′-*cyclic*-Nucleotide Activator) **Chicken, Recombinant** Expressed in *E. coli* **Purity: ≥95%** **Activity:** will activate nitric oxide synthase. MW 16,700	1 mg	183.00
657821 -20°C	**CALMODULIN** *POLYCLONAL ANTIBODY* **Anti-Bovine** **Host:** goat **Form:** delipidized pooled antiserum **Conc/Titer:** 1:100 **Applications:** Western Blot The antiserum was produced in goats by inoculation with of purified bovine brain calmodulin. Calmodulin is a small Ca^{2+} binding protein with a molecular weight of 17,000 daltons, identified in all animal and plant cells that have been examined. It is involved in the control of a large number of cellular metabolic reactions and many processes associated with the cytoskeletal contractile apparatus such as the control of myosin light chain kinase activity which regulates myosin contraction in smooth muscle and non-muscle cells.	1 ml	220.75
	CALMODULIN-DEPENDENT PROTEIN KINASE SUBSTRATE *See*: Syntide 2		
195895 -70°C	**CALMODULIN DEPENDENT PROTEIN KINASE II-α** (CaM Kinase II) **Rat, Recombinant** **α-Subunit** Involved in modulating neurite outgrowth of the cAMP system. **Activity:** 250,000 units/ml **Unit Definition:** one unit will catalyze the transfer of 1 pmol of phosphate to KRQQSFDLF per minute at 30°C, pH 7.5. MW 33 kDa	250 U 1 KU	25.20 73.50

CATALOG NUMBER			U.S. $
159561 **0°C**	**CALMODULIN-DEPENDENT PROTEIN KINASE II (281-309)** Met-His-Arg-Gln-Glu-Thr-Val-Asp-Cys-Leu-Lys-Lys-Phe-Asn-Ala-Arg-Arg-Lys-Leu-Lys-Gly-Ala-Ile-Leu-Thr-Thr-Met-Leu-Ala Potent inhibitor of calmodulin-dependent protein kinase II. **Ref.:** Colbran, R.J., et al., J. Biol. Chem., **208**, 18145 (1988).	100 µg	90.55
159562 **0°C**	**CALMODULIN-DEPENDENT PROTEIN KINASE II (290-309)** [115044-69-4] Leu-Lys-Lys-Phe-Asn-Ala-Arg-Arg-Lys-Leu-Lys-Gly-Ala-Ile-Leu-Thr-Thr-Met-Leu-Ala Inhibitor of Ca^{2+}/Calmodulin-dependent protein kinase II **Ref.:** Payne, M.E., et al., J. Biol. Chem., **263**, 7190 (1988).	100 µg	59.65
158834 **0-5°C**	**CALPAIN INHIBITOR I** [110044-82-1] (N-Ac-Leu-Leu-Norleucinal) **Purity: 98%** An inhibitor of both Calpain I and II (calcium-dependent cysteine proteases). Has been reported to be useful in the study of cytoskeletal and muscle protein turnover. **Ref:** 1) Murachi, T., Trends Biochem. Sci., **8**, 167 (1983). 2) Yoshimura, et.al., J. Biol. Chem., **258**, 8883 (1983). MW 383.5	1 mg 5 mg 10 mg	13.75 57.35 103.20
158835 **0-5°C**	**CALPAIN INHIBITOR II** [136632-32-1] (N-Ac-Leu-Leu-Methioninal) **Purity: >98%** An inhibitor of both Calpain I and II (calcium-dependent cysteine proteases). Has been reported to be useful in the study of cytoskeletal and muscle protein turnover. **Ref:** 1) Murachi, T., Trends Biochem. Sci., **8**, 167 (1983). 2) Yoshimura, et.al., J. Biol. Chem., **258**, 8883 (1983). MW 403.6	1 mg 5 mg 10 mg	13.75 57.35 103.20
159563 **0°C**	**CALPEPTIN** [117591-20-5] (N-CBZ-L-Leucyl-Norleucinal) Inhibitor of Calpain and Cathepsin L. **Ref.:** Sasaki, et al., J. Enz. Inhib., **3**, 195 (1990). $C_{20}H_{30}N_2O_4$ MW 362.5	5 mg 10 mg	72.00 131.00
158882 **0°C**	**CALPHOSTIN C** [121263-19-2] (UCN-1028C) **Purity: 99%** From *Cladosporium cladosporioides* Highly specific and potent protein kinase C inhibitor. **Ref.:** 1. Kobayashi, E., et.al., J. Antibiot., **42**, 1470 (1989). 2. Lida, T., et.al., ibid., **42**, 1475 (1989). $C_{44}H_{38}O_{14}$ MW 790.6	100 µg	113.95
158378 **0-5°C**	**CALYCULIN A** [101932-71-2] **Purity: ≥95%** Phosphatase inhibitor with very potent inhibitory activity against both PP1 and PP2A phosphatases. IC_{50} values of approximately 1 nm for both PP1 and PP2A. **Ref.:** 1. Ishihara, H., et.al., Biochem. Biophys. Res. Commun., **159**, 871 (1989). 2. Suganuma, M., et.al., Cancer Res., **50**, 3521 (1990). $C_{50}H_{81}N_4O_{15}P$ MW 1009.18	10 µg 50 µg	89.95 335.65

CATALOG NUMBER			U.S. $
159732 **0-5°C**	**CAMPTOTHECIN** [7689-03-4] **Purity: 97%** Binds to and stabilizes the topoisomerase-DNA covalent complex which reversibly inhibits nuclear topoisomerase I. Also, inhibits TAT-mediated HIV-1 trasactivation. **Ref.:** 1. Hertzberg, R.P., et al., *Biochem. J.*, **28**, 4629 (1990). 2. Hsiang, Y.H., et al., *J. Biol. Chem.*, **260**, 14873 (1985). 3. Li, C.J., et al., *J. Biol. Chem.*, **269**, 7051 (1994). $C_{20}H_{16}N_2O_4$ MW 348.4	25 mg 50 mg 100 mg 250 mg	17.00 30.00 55.00 130.00
26027 **0-5°C**	**CAMPTOTHECIN, [^{3}H(G)]** Sp. Act. 100-500 mCi/mmol 3.70-18.5 GBq/mmol Solid under argon. *Please call for delivery information.* MW 348.34	1 mCi	1696.65
100186 **0-5°C**	**L-CANAVANINE SULFATE** [2219-31-0] **Crystalline** Isolated from Jack Beans Inhibits arginine metabolism, and is a substrate in certain transamidination reactions. Decomposed by strong acids and light. Soluble in chloroform, acetone and methanol. $C_5H_{12}N_4O_3 \bullet H_2SO_4$ MW 274.2	100 mg 250 mg 1 g	10.75 26.00 99.85
158883 **-20-0°C**	**CANTHARIDIC ACID** [28874-45-5] $C_{10}H_{14}O_5$ MW 214.2	5 mg 10 mg	44.15 83.65
158884 **-20-0°C**	**CANTHARIDIN** [56-25-7] $C_{10}H_{12}O_4$ MW 196.2	25 mg 100 mg	45.90 143.30
	CAPSAICIN *See*: 8-Methyl-N-vanillyl-6-nonenamide		
159796 **RT**	**CAPSAZEPINE** [138977-28-3] (N-[2-(4-Chlorophenyl)ethyl]-1,3,4,5-tetrahydro-7,8-dihydroxy-2H-2-benzazepine-2-carbothioamide) A competitive antagonist for capsaicin and resiniferatoxin. $C_{19}H_{21}N_2O_2SCl$ MW 376.9	1 mg 5 mg	22.95 91.70
	CARBACHOL *See:* Carbamylcholine Chloride		
159080 **-20°C**	**CARBACYCLIN** [69552-46-1] (6α-Carba-prostaglandin I_2; Carbocyclic PGI_2) **Purity: 99%** **Crystalline** Analog of prostaglandin with similar activity. $C_{21}H_{34}O_4$ MW 350.5	1 mg	258.00
194154 **0-5°C**	**CARBADOX** [6804-07-5] (3-[2-Quinoxalinylmethylene]carbazic acid methyl ester-N,N′-dioxide) **Purity: 97%** $C_{11}H_{10}N_4O_4$ MW 262.2	5 g 25 g 100 g	11.00 19.00 55.00
100194 **RT**	**CARBAMYLCHOLINE CHLORIDE** [51-83-2] (Carbachol) **Crystalline** **Purity: 99%** Non-selective agonist that is resistant to the action of cholinesterase. Inhibits apoptotic death of cultured granule neurons. $C_6H_{15}ClN_2O_2$ MW 182.65	10 g 25 g 100 g	18.00 32.00 131.00

CATALOG NUMBER			U.S. $
150557 0-5°C	**CARBETAPENTANE** [23142-01-0] (1-Phenylcyclopentanecarboxylic acid 2-[2-diethylaminoethoxy]ethyl ester) **Citrate Salt** High affinity agonist for sigma$_1$ receptors. Antitussive White crystalline powder $C_{20}H_{31}NO_3 \bullet C_6H_8O_7$ MW 525.6	250 mg 1 g	49.00 160.00
153757 RT	**S(-)-CARBIDOPA** [28860-95-9] (S(-)-α-Hydrazino-3,4-dihydroxy-α-methylbenzenepropanoic acid) Used as a Parkinson's Disease therapeutic in combination with L-DOPA. $C_{10}H_{14}N_2O_4$ MW 226.2	10 mg 15 mg 25 mg 100 mg	16.00 20.00 28.00 91.25
151446 0°C	**(±)CARBOCYCLIC THROMBOXANE A$_2$** [74034-56-3] (CTA$_2$) Supplied as 50 µg/ml in ethanol. $C_{22}H_{36}O_3$ MW 348.5	100 µg 500 µg	57.35 229.30
159731 RT	**β-CARBOLINE-3-CARBOXYLIC ACID BUTYL ESTER** [84454-35-3] Benzodiazepine receptor ligand $C_{18}H_{16}N_2O_2$ MW 268.3	1 mg 5 mg	14.35 48.70
153715 RT	**β-CARBOLINE-3-CARBOXYLIC ACID ETHYL ESTER** [74214-62-3] (β-CCE) **Purity: 98%** Inverse agonist to benzodiazepine $C_{14}H_{12}N_2O_2$ MW 240.3	25 mg 250 mg	15.00 86.75
154934 0-5°C	**β-CARBOLINE-3-CARBOXYLIC ACID METHYL ESTER** [69954-48-9] (β-CCM) Benzodiazepine inverse agonist **Ref.:** Lippke, K.P., et al., J. Med. Chem., **26**, 499 (1983). $C_{13}H_{10}N_2O_2$ MW 226.2	10 mg 25 mg 100 mg	24.95 99.75 169.50
153774 RT	**β-CARBOLINE-3-CARBOXYLIC ACID PROPYL ESTER** [76808-18-9] (β-CCP) Benzodiazepine inverse agonist $C_{15}H_{14}N_2O_2$ MW 254.3	10 mg 15 mg 25 mg	19.55 27.35 43.35
159735 0°C	**N-CARBOMETHOXYCARBONYL-D-PRO-D-PHE BENZYL ESTER** [129988-00-7] (Harvard Peptide) Blocks gp120 binding to CD4 glycoprotein. Reported to inhibit infection by HIV. **Ref.:** Finberg, R. W., et al., Science, **249**, 287 (1990). $C_{24}H_{26}N_2O_6$ MW 438.5	1 mg 5 mg 25 mg	11.45 28.10 112.35
159736 0°C	**N-CARBOMETHOXYCARBONYL-PRO-PHE BENZYL ESTER** Blocks gp120 binding to CD4 glycoprotein and inhibits HIV infection, but is less active than the D-isomer peptide. **Ref.:** Finberg, R.W., et al., Science, **249**, 287 (1990). $C_{24}H_{26}N_2O_6$ MW 438.5	1 mg 5 mg	13.75 55.00
153756 -20-0°C	**5-CARBOXAMIDOTRYPTAMINE MALEATE** [74885-09-9] 5-HT$_1$ serotonin receptor agonist $C_{11}H_{13}N_3O \bullet C_4H_4O_4$ MW 319.3	1 mg 5 mg	17.00 72.00
159564 0-5°C	**1-(7-CARBOXYHEPTYL)IMIDAZOLE Hydrochloride** Selective thromboxane synthetase inhibitor. **Ref.:** Kayama, et al., Prostaglandins, **21**, 543 (1981) $C_{11}H_8N_2O_2 \bullet HCl$ MW 246.7	5 mg 25 mg	34.40 149.05

CATALOG NUMBER			U.S. $
196051 -20°C	**1-[2-(CARBOXYLATO)PYRROLIDIN-1-YL]DIAZEN-1-IUM-1,2-DIOLATE METHANOL** (PROLI NONOate, PROLI/NO) **Disodium Salt** **Purity: ≥98%** A nitric oxide donor. **Ref.:** Saavedra, J.E., et al., Jour. of Med. Chem., **39(22)**, 4361-4365 (1996). $C_5H_7N_3O_4Na_2$ MW 251.1	1 mg 5 mg 25 mg	10.50 27.30 99.75
159740 RT	**(±)-3-CARBOXYPHENYLGLYCINE** [2196-57-8] $C_9H_9NO_4$ MW 195.2	1 mg 5 mg 10 mg	21.45 86.00 155.90
158885 RT	**(±)-3-(2-CARBOXYPIPERAZIN-4-YL)-PROPYL-1-PHOSPHONIC ACID** [100828-16-8] (CPP) **Purity: 98%** Strong NMDA antagonist. **Ref.:** Davies, J., et.al., Brain Res., **382**, 169 (1986) $C_8H_{17}N_2O_5P$ MW 252.2	5 mg	72.80
196042 RT	**R-(-)-3-(2-CARBOXYPIPERAZIN-4-YL)-PROPYL-1-PHOSPHONIC ACID** [126453-07-4] (D-CPP; R-CPP) **Purity: ≥98%** Potent and selective NMDA antagonist. **Ref.:** Chapman, A.G., et.al., Eur. Jour. of Pharmacol., **178(1)**, 97-99 (1990) $C_8H_{17}N_2O_5P$ MW 252.2	1 mg 5 mg	29.95 118.50
159815 0-5°C	**CARBOXY-PTIO** [148819-94-7] (2-(4-Carboxyphenyl)-4,4,5,5-tetramethylimidazoline-1-oxyl-3-oxide) **Potassium Salt** Nitric Oxide radical scavenger with antagonistic action against the NO free radical. **Ref.:** Akaike, T., et al., Biochemistry, **32**, 827 (1993). $C_{14}H_{16}N_2O_4K$ MW 315.4	1 mg 5 mg 25 mg	11.75 30.00 120.00
153548 RT	**CARISOPRODOL** [78-44-4] (1-Methylethyl)carbamic acid 2-[[(aminocarbonyl)oxy]-methyl]-2-methylpentyl ester) $C_{12}H_{24}N_2O_4$ MW 260.3	250 mg 1 g	7.00 15.00
152944 -20-0°C	**α-CASEIN, Fragment 90-95** [83471-50-5] (Arg-Tyr-Leu-Gly-Tyr-Leu) **Ref:** Loukas, S., et al., Biochemistry, **22**, 4567 (1983). $C_{38}H_{57}N_9O_9$ MW 783.9	1 mg	30.30
152945 -20-0°C	**α-CASEIN, Fragment 90-96** [83471-49-2] (Arg-Tyr-Leu-Gly-Tyr-Leu-Glu) $C_{43}H_{64}N_{10}O_{12}$ MW 912	1 mg 5 mg	35.00 163.00
195818 -20°C	**CASEIN KINASE II** EC 2.7.1.37 **Human, Recombinant** Expressed in *E. coli* Supplied at 0.7 mg/ml in Tris/NaCl/0.1% Triton X-100. **Activity:** 700 kU/mg protein **Unit Definition:** one unit will transfer one pmol of phosphate from ATP to peptide substrate per minute at 30°C. Free of proteases and phosphatases.	10 KU	330.70

CATALOG NUMBER			U.S. $
195946 -20°C	**CASEIN KINASE II** **Human, Recombinant** Expressed in *E. coli* **α-Subunit** Catalytic subunit of protein kinasae CK2. **Unit Definition:** one unit will catalyze the transfer of 1 µmol of phosphate from ATP to the synthetic casein kinase II substrate RRRDDDSDDD per minute at pH 8.5, 37°C. One vial contains 10 mU. MW 45,100	1 vial	367.20
195947 -20°C	**CASEIN KINASE II** **Human, Recombinant** Expressed in *E. coli* **β-Subunit** **Purity: ≥99%** Enhances enzymatic activity and specificity to the α-subunit of protein kinase CK2. Contains no detectable proteases. MW 24,900	10 µg	374.50
195842 -20°C	**CASEIN KINASE II SUBSTRATE** Arg-Arg-Glu-Glu-Glu-Thr-Glu-Glu-Glu **Purity: ≥97%** A specific substrate for Casein Kinase II (CKII). MW 1206.3	1 mg	110.25
150567 -20-0°C	**β-CASOMORPHIN** [72122-62-4] (Tyr-Pro-Phe-Pro-Gly-Pro-Ile) **Source/Species:** Bovine **Ref.:** 1. Brantl, V., et al., Hoppe-Seyler's Z. Physiol. Chem., **360**, 1211 (1979). 2. Lottspeich, F., et al., Hoppe-Seyler's Z. Physiol. Chem., **361**, 1835 (1980). MW 790	0.5 mg 1 mg 5 mg	17.00 25.00 56.00
154498 0-5°C	**β-CASOMORPHIN** [102029-74-3] H_2N-Tyr-Pro-Phe-Val-Glu-Pro-Ile-OH **Source/Species:** Human **Ref.:** Greenberg, R., et al., (1984), J. Biol. Chem. **259**, 132 $C_{44}H_{61}N_7O_{11}$ MW 864.1	1 mg	15.00
150568 -20-0°C	**β-CASOMORPHIN, Fragment 1-3** [72122-59-9] (Tyr-Pro-Phe) $C_{23}H_{27}N_3O_5$ MW 425.5	0.5 mg 1 mg 5 mg	10.00 15.00 25.00
150569 -20-0°C	**β-CASOMORPHIN, Fragment 1-5** [72122-63-5] (Tyr-Pro-Phe-Pro-Gly) $C_{30}H_{37}N_5O_7$ MW 579.7	0.5 mg 1 mg 5 mg	10.00 25.00 45.00
152946 -20-0°C	**[D-Ala^2,Hyp^4,Tyr^5]-β-CASOMORPHIN, Fragment 1-5 Amide** [102029-98-1] (Tyr-D-Ala-Phe-Hydroxy-Pro-Tyr-NH_2) $C_{35}H_{42}N_6O_8$ MW 674.8	1 mg	33.30
152949 -20-0°C	**[Des-Tyr^1]-β-CASOMORPHIN** [100900-41-2] (Pro-Phe-Pro-Gly-Pro-Ile) $C_{32}H_{46}N_6O_7$ MW 626.8	1 mg	24.00
150570 0-5°C	**CASTANOSPERMINE** [79831-76-8] (1,6,7,8-tetrahydroxy-octahydroindolizine) Lyophilized powder Under desiccant A potent α and β-glucosidase inhibitor. Also known to cause accumulation of high mannose glycoproteins, such as concanavalin A. $C_8H_{15}NO_4$ MW 189.2	1 mg 5 mg	42.00 138.00

CATALOG NUMBER			U.S. $
	CAVEOLIN *MONOCLONAL ANTIBODY* (22kDa RSV-SRC Substrate, Anti-) **Clone:** 2283 **Isotype:** purified Ig fraction from mouse ascites **Conc/Titer:** 1:1,000-1:5,000 Applications: ELISA; Immunoblotting; Immunoprecipitation; Immunohistology It has been suggested that this protein is a mediator of transformation by the tyrosine kinase class of oncogenes. For this product, a monoclonal antibody (ICN PY20) was coupled to agarose and used as an affinity chromatography medium to isolate phosphotyrosine-containing proteins from Rous sarcoma virus-transformed chick embryo fibroblasts. Balb/c mice were immunized with these PY20 proteins for production of antibodies to the 22 kDa tyrosine kinase substrate. Hybridomas were selected for reactivity against the mixture of PY-proteins by ELISA and against the 22 kDa protein by Western Blot. The antibody is packaged at a concentration of 1 mg/ml in 50% glycerol, 5mM Tris, pH 8.2, 25mM NaCl, 1.5 mM NaN_3. It is easily conjugated to enzymes and fluorochromes. **Ref:** 1. Glenney, J.R., Jr., *J. Biol. Chem.*, **264**, 20163-20166 (1989). 2. Glenney, J.R., Jr. and Zokas, L., *J. Biol. Chem.*, **108**, 2401-2408 (1989).		
697002		50 µg	380.35
697001		100 µg	650.45
193599 0-5°C	**sCD14 ELISA KIT** The sCD14 kit is a sandwich enzyme immunoassay for the determination of soluble CD14 in human serum, plasma, liquor, synovial fluid, urine, and cell culture supernatants. An anti-CD14 oligoclonal antibody is adsorbed to polystyrene microtiter wells. Soluble CD14 present in the sample or the standard binds to the antibodies on the coated well. A biotinylated anti-CD14 monoclonal antibody directed against another epitope on the CD14 molecule is simultaneously added. After washing, a streptavidin peroxidase conjugate binds to the bound complex, completing the sandwich. Unbound conjugate is removed by washing, and the substrate solution is added to the wells. A colored product is formed in proportion to the amount of CD14 present in the sample. The kit is a 12 x 8 format. *FOR RESEARCH USE ONLY!*	1 each	986.75
685521 0-5°C	**CD45** *MONOCLONAL ANTIBODY* **Anti-Human** **Clone:** T200 (Also known as HuLy-m4 from 190.2F2.5) **Isotype:** purified mouse IgG_1 **Conc/Titer:** 0.5 mg/ml Applications: Flow Cytometry; Indirect Immunofluorescence; Indirect Immunoperoxidase staining This antibody detects the major surface glycoprotein analog of the murine and rat T200 molecule which is found on blood lymphocytes, monocytes, granulocytes, null cells, platelets, thymocytes, tonsillar cells, and myeloid cells from bone marrow.	0.5 ml	285.00

CATALOG NUMBER			U.S. $
685941 0-5°C	**CD45RO** *MONOCLONAL ANTIBODY* **Anti-Human** **Clone:** UCHL-1 **Isotype:** mouse IgG_1 kappa **Conc/Titer:** 1 mg/ml **Applications:** immunohistology; immunofluorescence; immunoprecipitation This antibody reacts with NK cells, T cells and B cell subsets, monocytes, and macrophages. It binds an epitope strongly expressed on the lower molecular weight isoform (p180) of the human leukocyte common antigen (LCA) family, close to the UCHL-1 epitope. This epitope is also weakly expressed on 190 kDa (exon B) and 205 kDa (exons AB) isoforms of LCA. This antibody stains most thymocytes (about 50% of medullary thymocytes) and also mature myeloid cells.	0.1 mg	208.00
685961 0-5°C	**CD45RO F(ab')$_2$** *MONOCLONAL ANTIBODY* **Anti-Human** **Clone:** A6 **Isotype:** mouse IgG_1 kappa **Conc/Titer:** 1 mg/ml **Applications:** immunohistology; immunofluorescence; immunoprecipitation This antibody reacts with NK cells, T cells and B cell subsets, monocytes, and macrophages. It binds an epitope strongly expressed on the lower molecular weight isoform (p180) of the human leukocyte common antigen (LCA) family, close to the UCHL-1 epitope. This epitope is also weakly expressed on 190 kDa (exon B) and 205 kDa (exons AB) isoforms of LCA.	0.1 mg	298.00
692371 -20°C	**L-CELL ADHESION MOLECULE** *MONOCLONAL ANTIBODY* (Anti-L-CAM; Anti-Uvomorulin) **Anti-Human** **Clone:** 6 F9 **Isotype:** mouse IgG_1 **Conc/Titer:** 1:5-1:20 **Applications:** ELISA; Immunoblotting; Immunostaining of cell suspensions, acetone-fixed frozen and formalin-fixed paraffin-embedded tissue sections. Supplied as cell supernatant purified by ammonium sulfate precipitation with 1% BSA and 0.09% sodium azide. This antibody reacts to E-cadherin (epithelial Ca^{2+} dependent cell adhesion molecule) in ELISA and show specific reaction to teh 120 kDa and 80 kDa ARC-1 polypeptides in immunoblotting. **Ref.:** Frixen, U.H., et al., J. Cell Biolog, **113**, 173-185 (1991). 2. Umbas, R., et al., Cancer Res., **52**, 5104-5109 (1992).	1 ml	215.00
158886 RT	**CGS 12066B DIMALEATE** [109028-10-6] **Purity: 99%** Specific 5-HT_{1B} agonist. **Ref.:** Neale, R.F., et.al., Eur. J. Pharmacol., **136**, 1 (1987). MW 566.5	5 mg 20 mg	36.00 125.00
193630 RT	**CGS 15943** [104615-18-1] Potent, selective A_1-Adenosine receptor antagonist. **Ref.:** Jarvis, et al., Mol. Pharmacol., **39**, 49 (1990). $C_{13}H_8N_5OCl$ MW 285.7	1 mg 10 mg	7.00 41.50

CATALOG NUMBER			U.S. $
193631 -20°C	**CGS 21680** [124182-57-6] **Hydrochloride** Adenosine receptor agonist which exhibits higher selectivity for A_2 versus A_1 receptors. **Ref.:** Jarvis, et al., J. Pharmacol. Exp. Ther., **251**, 888 (1989). $C_{23}H_{29}N_7O_6 \bullet HCl$ MW 536.0	1 mg 5 mg 10 mg	25.00 95.00 172.00
158887 -20-0°C	**CHARYBDOTOXIN** [95751-30-7] (pGlu-Phe-Thr-Asn-Val-Ser-Cys-Thr-Thr-Ser-Lys-Glu-Cys-Trp-Ser-Val-Cys-Gln-Arg-Leu-His-Asn-Thr-Ser-Arg-Gly-Lys-Cys-Met-Asn-Lys-Lys-Cys-Arg-Cys-Tyr-Ser) **Purity: >98%** **Scorpion** *Leiurus quinquestriatus* **venom peptide** A potent and specific inhibitor of Ca^{2+} activated K^+ channels in cells of the anterior pituitary and bovine aortic smooth muscle. Also, demonstrates inhibition of potassium ion conductance and human T lymphocyte mitogen-stimulated proliferation. **Ref.:** 1. Gimenez-Gallego, G., et.al., Proc. Natl. Acad. Sci. USA, **85**, 3329 (1988). 2. Mackinnon, R. and Miller, C., Science, **245**, 1382 (1989). 3. Deutsch, C., et.al., J. Biol. Chem., **266**, 3668 (1991). 4. Price, M., et.al., Proc. Natl. Acad. Sci. USA, **86**, 10171 (1989). MW 4295.9	100 µg	586.30
159567 -20-0°C	**[Gln^{12}]-CHARYBDOTOXIN** (pGlu-Phe-Thr-Asn-Val-Ser-Cys-Thr-Thr-Ser-Lys-Gln-Cys-Trp-Ser-Val-Cys-Gln-Arg-Leu-His-Asn-Thr-Ser-Arg-Gly-Lys-Cys-Met-Asn-Lys-Lys-Cys-Arg-Cys-Tyr-Ser) MW 4294.2	100 µg	551.25
159568 -20-0°C	**[His^{19}]-CHARYBDOTOXIN** (pGlu-Phe-Thr-Asn-Val-Ser-Cys-Thr-Thr-Ser-Lys-Glu-Cys-Trp-Ser-Val-Cys-Gln-His-Leu-His-Asn-Thr-Ser-Arg-Gly-Lys-Cys-Met-Asn-Lys-Lys-Cys-Arg-Cys-Tyr-Ser) MW 4276.2	100 µg	288.00
159569 -20-0°C	**[Lys(Ac)^{11}]-CHARYBDOTOXIN** (pGlu-Phe-Thr-Asn-Val-Ser-Cys-Thr-Thr-Ser-Lys(Ac)-Glu-Cys-Trp-Ser-Val-Cys-Gln-Arg-Leu-His-Asn-Thr-Ser-Arg-Gly-Lys-Cys-Met-Asn-Lys-Lys-Cys-Arg-Cys-Tyr-Ser) MW 4337.2	100 µg	551.25
158888 0°C	**CHELERYTHRINE CHLORIDE** [3895-92-9] (1,2-Dimethoxy-N-methyl-[1,3]-benzodioxolo[5,6c]phenanthridinium) **Purity: 98%** Specifically inhibits protein kinase C. **Ref.:** Herbert, J.M., et.al., ibid., **172**, 993 (1990). $C_{21}H_{18}NO_4Cl$ MW 383.8	1 mg 5 mg 10 mg 25 mg	21.00 68.75 131.90 309.60
159741 RT	**CHLORMEZANONE** [80-77-3] Skeletal muscle relaxant. $C_{11}H_{12}NO_3SCl$ MW 273.8	250 mg 1 g	28.65 100.85
153755 RT	**2-CHLOROADENOSINE** [146-77-0] (2-CADO) A selective A_1 adenosine receptor agonist $C_{10}H_{12}ClN_5O_4$ MW 301.7	2 mg 5 mg 10 mg 50 mg	8.00 12.95 22.90 65.75

CATALOG NUMBER			U.S. $
152400 RT	**8-CHLOROADENOSINE-*cyclic*-3′,5′-MONOPHOSPHATE** [41941-56-4] (8-Chloro-cAMP). An analog of c-AMP that demonstrates novel properties in cell culture, including steroidogenic activity in rat adrenal cells and inhibition of a variety of cancer cells in culture. **Ref.:** 1. Free, C.A. and Paik, V.S., Endocrinology, **100**, 1287-1293 (1977). 2. Tagliaferri, P., et al., Cancer Res., **48**, 1642-1650 (1988). $C_{10}H_{11}N_5O_6PCl$ MW 363.7	5 mg 10 mg 25 mg 250 mg	78.00 128.00 275.00 795.00
193632 RT	**2-CHLORO-N^6-CYCLO-PENTYLADENOSINE** [37739-05-2] (CCPA) A very selective A_1 Adenosine receptor agonist. $C_{15}H_{20}N_5O_4Cl$ MW 369.8	1 mg 5 mg 25 mg	16.55 62.00 260.00
159903 RT	**7-CHLORO-3-(CYCLOPROPYL-CARBONYL)-4-HYDROXY-2(1H)-QUINOLINE** (L-701252) **Purity: 99%** Antagonist of NMDA receptor glycine site and an anticonvulsant. **Ref.:** Rowley, M., et al., *J. Med. Chem.*, **36**, 3386 (1993). MW 263.7	1 mg 5 mg	14.95 61.00
153753 0-5°C	**CHLOROETHYLCLONIDINE** [98086-36-3] **Dihydrochloride** $C_{13}H_{17}Cl_3N_4$ • 2HCl MW 408.6	1 mg 10 mg 25 mg	13.50 105.00 238.00
154966 RT	**N-(2-CHLOROETHYL)-N-ETHYL-2-BROMOBENZYLAMINE** [40616-75-9] (DSP-4) **Hydrochloride** α-adrenergic agent **Ref.:** Dooley, D.J., et al., 6th European Neuroscience Congress (1982). $C_{11}H_{15}BrClN$ • HCl MW 313.1	5 mg 25 mg 100 mg	10.00 37.00 142.80
153754 0-5°C	**R(-)-CHLOROETHYL-NORAPOMORPHINE** [75344-87-5] (NCA) **Hydrochloride** Dopamine receptor alkylating agent. $C_{18}H_{18}ClNO_2$ • HCl MW 352.3	1 mg 10 mg	10.00 89.30
153546 RT	**7-(β-CHLOROETHYL)-THEOPHYLLINE** [5878-61-5] (1,3-Dimethyl-7-(β-chloroethyl)xanthine) $C_9H_{11}ClN_4O_2$ MW 242.6	100 mg 1 g	21.75 36.15
159746 0-5°C	**5-CHLOROINDOLE-2-CARBOXYLIC ACID** [10517-21-2] Antagonist of NMDA receptor at the glycine site. **Ref.:** Huettner, Science, **243**, 1611 (1989). C_9H_6NCl MW 195.6	1 g 5 g	34.50 124.25
154176 -20-0°C	**1-(8-CHLORO-5-ISOQUINOLINE-SULFONYL)PIPERAZINE** (HA-156) **Crystalline** **Purity: >97%** A Protein Kinase C inhibitor.	10 mg	76.50
153752 RT	**7-CHLOROKYNURENIC ACID** [18000-24-3] (7-Chloro-4-hydroxyquinoline-2-carboxylic acid) NMDA receptor antagonist at the glycine site. $C_{10}H_6ClNO_3$ MW 223.6	1 mg 10 mg 25 mg	8.00 49.00 105.00

CATALOG NUMBER			U.S. $
159748	**6-CHLOROMELATONIN** Inhibits calcium-dependent dopamine release. $C_{13}H_{15}N_2O_2Cl$ MW 266.7	1 mg 5 mg	19.25 81.00
159750 0-5°C	**1-(5-CHLORONAPHTHALENE-SULFONYL)HOMOPIPERAZINE** [105637-50-1] **Hydrochloride** Inhibits myosin light-chain kinase. $C_{15}H_{17}N_2O_2SCl$ • HCl MW 361.3	1 mg 5 mg	10.50 43.00
158889 0°C	**1-(5-CHLORONAPHTHALENE-1-SULFONYL)-1H-HEXAHYDRO-1,4-DIAZEPINE** [105637-50-1] (ML-9) **Hydrochloride** **Purity: 99%** Specifically inhibits MLC kinase. **Ref.:** 1. Saitoh, M., et.al., J. Biol. Chem., **262**, 7796 (1987). 2. Saitoh, M. et.al., Biochem. Biophys. Res. Commun., **140**, 280 (1986). $C_{15}H_{17}N_2O_2SCl$ • HCl MW 361.3	05 mg 10 mg 25 mg	35.00 51.60 97.45
158890 RT	**1-(3-CHLOROPHENYLAMINO)-4-PHENYLPHTHALAZINE** (MY 5445) **Purity: 99%** Specifically inhibits cGMP-specific phosphodiesterase. **Ref.:** Hagiwara, M., et.al., J. Pharmacol. Exp. Ther., **228**, 467 (1984). MW 331.8	1 mg 10 mg	13.00 107.45
159751 RT	**1-(3-CHLOROPHENYL)BIGUANIDE** [2113-05-5] **Hydrochloride** Specific agonist for 5-HT_3 receptor. **Ref.:** Sepulveda, et al., Br. J. Pharmacol., **104**, 536 (1991). $C_8H_{10}N_5Cl$ • HCl MW 248.1	5 mg 25 mg 100 mg	13.00 31.00 98.00
159752 RT	**4-CHLOROPHENYLGUANIDINE** **Hydrochloride** Specific inhibitor of Urokinase. $C_7H_8N_3Cl$ • HCl MW 206.1	5 mg 25 mg 100 mg	11.45 52.00 186.75
159753 0-5°C	**5-CHLORO-N-(6-PHENYLHEXYL)-1-NAPHTHALENESULFONAMIDE** [102649-78-5] (SC-9) Potent Protein Kinase C activator which apparently substitutes for phosphatidylserine. $C_{22}H_{24}NO_2SCl$ MW 401.9	1 mg 5 mg	16.50 72.00
196050 RT	**1-(2-CHLOROPHENYL)-N-METHYL-N-(1-METHYLPROPYL)-3-ISOQUINOLINECARBOXAMIDE** [85532-75-8] (PK-11195) **Purity: ≥98%** Benzodiazepine antagonist. **Ref.:** Le Fur, G., et al., Life Science, **32(16)**, 1849-1856 (1983). $C_{21}H_{21}ClN_2O$ MW 352.9	1 mg 5 mg 25 mg	10.50 33.60 115.50
150651 RT	**1-(m-CHLOROPHENYL) PIPERAZINE** [65369-76-8] **Hydrochloride** **Purity: ~97%** 5-HT_1 serotonin receptor agonist $C_{10}H_{13}ClN_2$ • HCl MW 233.1	1 g 5 g	12.45 27.00

CATALOG NUMBER			U.S. $
158891 -20-0°C	**8-(4-CHLOROPHENYLTHIO)-ADENOSINE-3′,5′-*cyclic*-MONOPHOSPHATE** [93882-12-3] (8-CPT cAMP) **Sodium Salt** cAMP analog which activates cAMP- and cGMP- dependent protein kinase. **Ref.:** Sandberg, M., et.al., Biochem. J., **279**, 521 (1991). $C_{16}H_{14}ClN_5O_6PSNa$ MW 493.8	10 mg 50 mg 100 mg	23.50 79.50 147.00
193634 -20°C	**8-(3-CHLOROSTYRYL)CAFFEINE** (1,3,7-Trimethyl-8-(3-chlorostyryl)xanthine) Selective A_{2a} adenosine receptor antagonist. **Ref.:** Jacobson, et al., J. Med. Chem., **36**, 1333 (1993). $C_{16}H_{15}N_4O_2Cl$ MW 330.8	1 mg 5 mg 25 mg	10.00 38.60 163.15
193947 -20°C	**CHLOROTOXIN** From *Leiurus q. quinquestriatus* The first polypeptide toxin reported to probe chloride ion channels. It inhibits submicromolar concentration small conductance chloride ion channels intracellularly. **Ref.:** DeBin, et al., Am. J. Physiol., **264**, C361 (1993). MW 3996	40 µg	319.70
159904 RT	**4-CHLORO-6-(2,3-XYLIDINO)-2-PYRIMIDINYLTHIOACETIC ACID** [50892-23-4] (WY-14643) **Purity: 98%** Potent activator of peroxisome proliferator-activated receptors (PPARs). **Ref.:** 1. Keller, H. and Wahli, W., *Trends Endocrinol. Metab.*, **4**, 291 (1993). 2. Dreyer, C., et al., *Cell*, **68**, 879 (1992). MW 323.8	10 mg 50 mg	23.40 105.00
150662 RT	**CHLORPHENESIN CARBAMATE** [886-74-8] (3-[4-Chlorophenoxy]-1,2-propanediol-1-carbamate) m.p. 88-91°C White crystalline powder An antifungal agent and a smooth muscle relaxant.	1 g	18.50
190325 RT	**CHLORPHENIRAMINE MALEATE** [113-92-8] Antihistaminic $C_{20}H_{23}ClN_2O_4$ MW 390.9	5 g 25 g 100 g	10.75 29.00 67.00
190326 RT	**CHLORPROMAZINE** [69-09-0] (2-Chloro-10-[3-dimethylamino-propyl] phenothiazine) **Hydrochloride** Reported to be useful as a substitute for benzidine, o-dianisidine and o-tolidine in the determination of microquantities of hemoglobin and peroxidase. **Ref.:** Lee, K.T. and Ling, H., Microchim. Acta. 995 (1969). $C_{17}H_{19}ClN_2S \bullet HCl$ MW 355.3	5 g 25 g 100 g	11.95 31.00 82.50

CATALOG NUMBER			U.S. $
190329 0°C	**CHOLERA ENTEROTOXIN** Lyophilized powder sealed under vacuum Each vial when reconstituted to 1ml with H_2O contains 1.0 mg (or 5.0 mg) of protein, at pH 7.5 suspended in 0.05 M Tris 0.003M NaN_3 0.001M Na_2EDTA, 0.2M NaCl Concentration: Determined by extinction at 280 nm. **Purity:** Preparation gives a single major band in discelectrophoresis. **Toxic Potency:** Determined by skin vascular permeability and expressed in Lb doses per µg Lowry protein **Ref.:** 1. Finkelstein, R.A., et al., J. Immunol., **113**, 145 (1974) 2. Finkelstein, R.A., CRC Crit. Rev. Microbiol, **2**, 553 (1973) 3. Finkelstein, R.A. and Lo Spalluto, J. Exp. Med., **130**, 185 (1969) 4. Hollenberg, M.D., et al., Proc. Nat. Acad. Sci. U.S.A., **71**, 4224 (1974)	1 mg 5 mg	85.00 380.00
150005 0°C	**CHOLERA TOXIN** From *V. cholerae* 569B Inaba **Purity: >95%** by SDS-PAGE Lyophilized in Tris-EDTA buffer, pH 7.5 Activator of adenylate cyclase	1 mg	90.50
159905 0-5°C	**CHOLERA TOXIN** From *Vibrio cholerae* **α-Subunit** Lyophilized Possesses ADP-ribosyltransferase activity. As effective as native toxin, it catalyzes ADP-ribosylation in broken cell preparations. However, without the presence of the B-subunit, it is not able to penetrate cells. **Ref.:** Gill, D.M. and Woolkalis, M.J., *Methods Enzymol.*, **195**, 267 (1991).	250 µg	195.00
150686 0°C	**CHROMOMYCIN A_3** [7059-24-7] (3β-O-(4-O-Acetyl-2,6-dideoxy-3-C-methyl-α-L-arabino hexopyranosyl)-7-methylolivomycin D; Aburamycin β; Toyomycin) Yellow powder m.p. 185-186°C Inhibitor of DNA and RNA polymerases. $C_{57}H_{82}O_{26}$ MW 1183.3	1 mg 5 mg	16.75 65.20
152845 -20-0°C	**CHYMOSTATIN** [9076-44-2] ([(S)-1-Carboxy-2-phenylethyl]-carbamoyl-α-[2-iminohexahydro-4(S)-pyrimidyl]-(S)-Gly-X-Phe-al) **Source/Species:** Microbial A mixture of type A, B, and C. X = Leu (Type A); Ile (Type B); Val (Type C). **Ref:** 1. Umezawa, H., et al., J. Antibiot., **23**, 425 (1970). 2. Tatsuta, K., et al., J. Antibiot., **26**, 625 (1973).	1 mg 5 mg 25 mg 50 mg	15.00 45.00 195.00 375.00
193635 RT	**CILOSTAMIDE** (N-Cyclohexyl-N-methyl-4-(1,2-dihydro-2-oxo-6-quinolyloxy)butyramide) Inhibitor of cGMP-inhibited phosphodiesterase. $C_{20}H_{28}N_2O_3$ MW 342.2	1 mg 5 mg	16.75 74.95
159757 RT	**CIMETEROL** [54239-37-1] A β-adrenergic agonist. $C_{12}H_{17}N_3O$ MW 219.3	1 mg 5 mg 25 mg	13.75 53.90 225.00

CATALOG NUMBER			U.S. $
150687 **0-5°C**	**CIMETIDINE** [51481-61-9] **Crystalline** Histamine H_2-receptor antagonist that inhibits gastric acid secretion and reduces pepsin production. Also a potent imidazoline I_1 receptor agonist. **Ref.:** Brimblecombe, R.W., et al., J. Int. Med. Res., **3**, 86 (1975). $C_{10}H_{16}N_6S$ MW 252.3	1 g 5 g 10 g 25 g	9.65 23.00 38.00 74.40
159758 **0-5°C**	**CINANSERIN** [1166-34-3] A 5-HT antagonist. $C_{20}H_{24}N_2OS$ MW 340.5	1 mg 5 mg 25 mg	12.50 48.00 215.50
159083 **RT**	**CINNAMYL-3,4-DIHYDROXY-α-CYANOCINNAMATE** (CDC) **Purity: 98%** Specifically inhibits 12-lipoxygenase. **Ref.:** Cho, H., et.al., J. Med. Chem., **34**, 1505 (1991). MW 321.3	10 mg	68.75
193637 **RT**	**CIRAZOLINE** [40600-13-3] **Hydrochloride** A selective α_1-adrenergic receptor agonist. $C_{13}H_{16}N_2O$ • HCl MW 252.7	1 mg 5 mg	11.50 46.30
101397 **RT**	**L-CITRULLINE** [372-75-8] (L-2-Amino-5-ureidovaleric acid) **Crystalline** $C_6H_{13}N_3O_3$ MW 175.2	5 g 25 g 100 g 500 g 1 kg	17.50 47.00 144.00 550.00 950.00
159759 **RT**	**CLENBUTEROL** [37148-27-9] A β_2-agonist and bronchodilator. $C_{12}H_{18}N_2OCl_2$ MW 277.2	5 mg 10 mg 50 mg 250 mg	8.00 12.50 42.00 145.00
191168 **0-5°C**	**CLINDAMYCIN** [21462-39-5] (7[S]-Chloro-7-deoxylincomycin; Cleocin) **Hydrochloride** $C_{18}H_{33}ClN_2O_5S$ • HCl MW 461.4	10 mg 50 mg 100 mg	28.35 92.45 167.00
158892 **0-5°C**	**CLINDAMYCIN PHOSPHATE** [24729-96-2] (Clindamycin-2-dihydrogen phosphate; 7(S)-Chloro-7-deoxylincomycin; Antibiotic U-28508E) $C_{18}H_{34}N_2O_8PSCl$ MW 505	10 mg 50 mg 100 mg	21.50 75.00 133.00
193638 **0-5°C**	**CLOBENPROPIT** [145231-45-4] (VUF 9153; N-(4-Chlorobenzyl)-S-[3-(4(5)-imidazolyl)propyl]isothiourea) **Dihydrobromide** A specific H_3 histamine receptor antagonist capable of crossing the blood brain barrier. **Ref.:** Schlicker, et al., Fundam. Clin. Pharmacol., **8**, 128 (1994). $C_{14}H_{17}N_4SCl$ • 2HBr MW 470.7	1 mg	35.90
190342 **RT**	**CLOFIBRATE** [637-07-0] [2-(p-Chlorophenoxy)-2-methylpropionic acid ethyl ester] $C_{12}H_{15}ClO_3$ MW 242.7	250 mg 1 g 5 g 10 g	9.25 22.00 73.00 124.00
153749 **0-5°C**	**CLOFILIUM TOSYLATE** [92953-10-1] (4-Chloro-N,N-diethyl-N-heptylbenzenebutanaminium tosylate) $C_{28}H_{44}ClNO_3S$ MW 510.15	15 mg 25 mg 50 mg	17.50 26.50 46.50
153751 **RT**	**CLOMIPRAMINE** [17321-77-6] (3-Chloro-10,11-dihydro-N,N-dimethyl-5H-dibenz[b,f]azepine-5-propanamine hydrochloride; Anafranil) **Hydrochloride** A serotonin uptake inhibitor. $C_{19}H_{23}ClN_2$ • HCl MW 351.3	25 mg 250 mg	6.00 12.75
190175 **0-5°C**	**CLONIDINE** [4205-90-7] **Hydrochloride** (2-(2,6-Dichloroaniline)-2-imidazoline) Antihypertensive, α_2-adrenoceptor agonist and imidazoline receptor ligand. $C_9H_9Cl_2N_3$ • HCl MW 266.6	100 mg 250 mg 1 g 5 g	21.50 49.50 165.00 469.00
159084 **-20°C**	**CLOPROSTENOL** [54276-21-0] (16-(m-chlorophenoxy)-tetranor-prostaglandin $F_{2\alpha}$ sodium salt) **Sodium Salt** **Purity: 98%** More potent than fluprostenol. **Ref.:** Dukes, M., et.al., Nature, **250**, 330 (1974). $C_{22}H_{28}O_6ClNa$ MW 446.9	1 mg	83.25
153750 **RT**	**CLORGYLINE** [17780-72-2] (N-Methyl-N-propargyl-3-(2,4-dichlorophenoxy)-propylamine) **Hydrochloride** Monoamine Oxidase-A inhibitor. $C_{13}H_{15}Cl_2NO$ • HCl MW 308.6	25 mg 50 mg 100 mg	26.10 47.70 86.75
159760 **RT**	**CLOZAPINE** [5786-21-0] Potent, selective muscarinic antagonist. Also exhibits the highest reported affinity for 5-HT_{1A} and 5-HT_{1C} sites. **Ref.:** Mason and Reynolds, Eur. J. Pharmacol., **221**, 397 (1992). $C_{18}H_{19}N_4Cl$ MW 326.8	5 mg 10 mg 50 mg 250 mg	7.00 12.25 49.00 215.00
26028 **0-5°C**	**CLOZAPINE, [N-Methyl-^{3}H]** Sp. Act. 10-20 Ci/mmol 370-740 GBq/mmol Ethanol under nitrogen Shipped in dry ice. *Please call for delivery information.* MW 326.45	25µCi 250µCi 4x250µCi	204.95 908.35 2060.45
	COCHLIOBOLIN A *See*: Ophiobolin A		
	COLCEMID *See*: Demecolcine		
101406 **RT**	**COLCHICINE** [64-86-8] Special Shipping Requirements: Hazardous Material. Contact Customer Service for details. $8.00 additional service charge per shipment. $C_{22}H_{25}NO_6$ MW 399.4	100 mg 500 mg 1 g 5 g	9.95 28.50 47.50 191.00
	COMPOUND 5 *See*: HDBA		
159026 **0°C**	**COMPOUND 48/80** [94724-12-6] Oligomeric mixture of condensation products from N-methyl-p-methoxyphenethylamine and formaldehyde. Protein G activator similar to mastoparan. Calmodulin and platelet PLC inhibitor. Also acts as a histamine releaser. **Ref.:** 1. Mousli, M., et.al., FEBS Lett., **259**, 260 (1990). 2. Gietzen, K., et.al., Biochim. Biophys. Acta., **736**, 109, (1983). 3. Gietzen, K., Biochem. J., **216**, 611 (1983). 4. Bronner, C., et.al., Biochim. Biophys. Acta., **920**, 301 (1987). MW 630	50 mg 100 mg	16.75 27.50

CATALOG NUMBER			U.S. $
158893 0°C	**CONDURITOL B EPOXIDE** [6090-95-5] (DL-1,2-Anhydro-myo-inositol) **Purity: 97%** A potent, irreversible inhibitor of plant β-glucosidases and mammalian glucocerebrosidases. **Ref.:** 1. Legler, G., Hoppe-Seyler's Z. Physiol. Chem., **351**, 25 (1970). 2. Datta, S.C. and Radin, N.S., Biochem. Biophys. Res. Commun., **152**, 155 (1988). $C_6H_{10}O_5$ MW 162.1	5 mg 25 mg	45.90 183.45
	(±)-CPP *See*: (±)-3-(2-Carboxypiperazin-4-yl)propyl-1-phosphonic acid		
159577 RT	**CROTON OIL** [8001-28-3] (Tiglium Oil) d= 0.94g/ml *POSSIBLE CARCINOGEN!*	10 g 25 g 100 g	17.95 39.00 130.00
159909 -20°C	**CV-6209** [117064-08-1] **Purity: 97%** Competitive antagonist to the PAF receptor. Inhibits platelet aggregation, hypotension, and lethality induced by PAF. **Ref.:** Terashita, Z., et al., *J. Pharmacol. Exp. Ther.*, **242**, 263 (1987). MW 642.3	1 mg	86.00
150738 0-5°C	**α-CYANO-3-HYDROXY-CINNAMIC ACID** [54673-07-3] **Purity: 99%** Inhibitor of mitochondrial pyruvate transport. **Ref.:** Halestrap, A.P., Biochem. J., **148**, 85 (1975). $C_{10}H_7NO_3$ MW 189.2	1 g 5 g	12.50 44.75
159761 RT	**6-CYANO-7-NITROQUINOXALINE-2,3-DIONE** [115066-14-3] (CNQX) **Purity: ≥98%** Potent, competitive and selective kainate/quisqualate (non-NMDA) receptor antagonist. $C_9H_4N_4O_4$ MW 232.2	1 mg 5 mg 10 mg	11.50 48.50 85.00
193641 0-5°C	**(+)-CYCLOAZOCINE** [3572-80-3] A sigma receptor antagonist which exhibits action on norepinephrine uptake. **Ref.:** Russi, J. Pharm. Sci., **74**, 97 (1985). $C_{18}H_{25}NO$ MW 271.4	1 mg 5 mg	16.55 49.60
153748 RT	**N^6-CYCLOHEXYLADENOSINE** [36396-99-3] (CHA) $C_{16}H_{23}N_5O_4$ MW 349.4	10 mg 50 mg	19.85 86.75
159011 RT	**1,6-*bis*-(CYCLOHEXYLOXIMINO-CARBONYLAMINO)-HEXANE** (RHC-80267) **Purity: 98%** Specifically blocks diacylglycerol (DAG) lipase activity in various cell lines of multiple species. **Ref.:** 1. Balsinde, J., et.al., J. Biol. Chem., **266**, 15638 (1991). 2. Southerland, C.A. and Amin, D., et.al., ibid., **257**, 14006 (1982). 3. Lindlisbacher, B., et.al., J. Neurochem., **54**, 1247 (1990). 4. Natarajan, R., et.al., Biochem. Biophys. Res. Commun., **156**, 171 (1988). MW 394.6	10 mg	74.55
153747 RT	**2-CYCLOOCTYL-2-HYDROXYETHYLAMINE** [57559-31-6] **Hydrochloride** Phenylethanolamine N-methyltransferase inhibitor $C_{10}H_{21}NO \bullet HCl$ MW 207.8	1 mg 5 mg	7.50 21.00

CATALOG NUMBER			U.S. $
153744 0-5°C	**N^6-CYCLOPENTYLADENOSINE** [41552-82-3] A_1 adenosine receptor agonist $C_{15}H_{21}N_5O_4$ MW 335.4	25 mg 100 mg 250 mg	27.50 75.00 151.00
153746 RT	**8-CYCLOPENTYL-1,3-DIMETHYLXANTHINE** [35873-49-5] (8-Cyclopentyltheophylline) A_1 adenosine receptor antagonist $C_{13}H_{16}N_4O_2$ MW 248.3	25 mg 100 mg	36.15 122.00
26029 0-5°C	**8-CYCLOPENTYL-1,3-DIPROPYLXANTHINE, [Dipropyl-2,3-^{3}H]** (CPX) Sp. Act. 80-120 Ci/mmol 2.96-4.44 TBq/mmol Ethanol solution. *Shipped with Dry Ice.* *Please call for delivery information.* MW 304.0	250 µCi 1 mCi	532.40 1150.90
153745 RT	**8-CYCLOPENTYL-1,3-DIPROPYLXANTHINE** [102146-07-6] (DPCPX, 1,3-Dipropyl-8-cyclopentylxanthine) A_1 adenosine receptor antagonist $C_{16}H_{24}N_4O_2$ MW 305.4	25 mg 50 mg 100 mg	39.50 69.00 128.00
158895 0°C	**CYCLOPIAZONIC ACID** [18172-33-3] From *Penicillium cyclopium* **Purity: 98%** Intracellular Ca^{2+} release inducer. Inhibits endoplasmic reticulum Ca^{2+}-ATPase. Highly selective for sarcoplasmic reticulum Ca^{2+}-ATPase. **Ref.:** Demaurex, N., et.al., J. Biol. Chem., **267**, 2318 (1992). 2. Goeger, D.E., et.al., Biochem. Pharmacol., **37**, 978 (1988). 3. Seidler, N.W., et.al., J. Biol. Chem., **264**, 17816 (1989). $C_{20}H_{20}N_2O_3$ MW 336.4	5 mg 10 mg 50 mg	44.00 79.75 265.00
153743 RT	**5′-(N-CYCLOPROPYL)-CARBOXAMIDOADENOSINE** [50908-62-8] Powerful A_2 adenosine receptor agonist $C_{13}H_{16}N_6O_4$ MW 320.3	10 mg 15 mg 25 mg	38.35 54.70 86.75
190316 0°C	**L-CYCLOSERINE** [339-72-0] (L-4-Amino-3-Isoxazolidinone) **Crystalline** Antibiotic substance Inhibitor of transaminases $C_3H_6N_2O_2$ MW 102.1	10 mg 25 mg	11.00 20.25
159762 0-5°C	**CYCLOTHIAZIDE** [2259-96-3] Strongly inhibits rapid glutamate receptor desensitization. **Ref.:** Yamada and Tang, J. Neurosci., **13**, 3904 (1993). $C_{14}H_{16}N_3O_4S_2Cl$ MW 389.4	1 mg 5 mg 10 mg	8.50 23.00 41.00
158896 0-5°C	**CYPERMETHRIN** [52315-07-8] Mixture of 8 isomers Cypermethrin is a Type II pyrethrin and a potent inhibitor of calcineurin (protein phosphatase 2B). $C_{22}H_{19}Cl_2NO_3$ MW 416.3	1 mg 10 mg	8.75 53.90
193642 RT	**CYPRODIME** [118111-51-6] ((-)-N-(Cyclopropylmethyl)-4,14-dimethoxymorphinan-6-one) **Hydrobromide** A µ-opioid receptor antagonist. $C_{22}H_{29}NO_3 \bullet HBr$ MW 436.4	1 mg	93.50

CATALOG NUMBER			U.S. $
	CYPROHEPTADINE	25 mg	7.50
190170	[41354-29-4]	100 mg	18.15
RT	**Hydrochloride**	250 mg	45.25
	Crystalline		
	Serotonin antagonist, antihistaminic and possibly a calcium channel blocker.		
	$C_{21}H_{21}N$ • HCl MW 323.9 (ANHYDRATE)		
	L-CYSTEINE	5 g	5.50
101444	[52-90-4]	25 g	9.85
RT	(β-Mercapto-L-alanine)	100 g	30.00
	Free Base	500 g	123.00
	Crystalline		
	$C_3H_7NO_2S$ MW 121.2		
	L-CYSTEINE	25 g	9.95
101446	[52-89-1]	100 g	27.75
RT	**Hydrochloride**	500 g	97.00
	Monohydrate	1 kg	165.00
	Crystalline	5 kg	675.00
	$C_3H_7NO_2S$ • HCl • H_2O MW 175.6		
	L-CYSTEINE	25 g	14.00
194646	[52-90-4]	100 g	27.00
RT	(β-Mercapto-L-alanine)	500 g	171.00
	Free Base	1 kg	319.00
	Cell Culture Reagent		
	Crystalline		
	$C_3H_7NO_2S$ MW 121.2		
	L-CYSTEINE	25 g	15.00
194647	[52-89-1]	100 g	40.80
RT	**Cell Culture Reagent**	500 g	142.20
	Monohydrate		
	Hydrochloride		
	$C_3H_7NO_2S$ • HCl • H_2O MW 175.6		
	CYTIDINE-5′-DIPHOSPHOCHOLINE	10 mg	7.75
101297	[33818-15-4]	50 mg	22.00
0°C	(CDP-Choline; Citicoline)	100 mg	31.50
	From Yeast	500 mg	99.00
	Monosodium Salt	1 g	167.00
	White crystalline powder.		
	CYTIDINE-5′-DIPHOSPHOCHOLINE	10 mg	12.00
150759	(CDP-Choline)	25 mg	23.05
0°C	**Free Acid**	50 mg	43.25
	White crystalline powder		
	CDP-Choline is an essential coenzyme in the biosynthesis of lecithin. This is a highly purified preparation of CDP-Choline but is less stable than the monosodium salt.		
	$C_{14}H_{26}N_4O_{11}P_2$ MW 488.3		
	CYTOCHALASIN A	1 mg	48.00
150769	[14110-64-6]		
0°C	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		
	CYTOCHALASIN B	1 mg	21.50
195119	[14930-96-2]	5 mg	84.00
0°C	From *Drechslera dematidea*	10 mg	150.00
	Crystalline		
	Interesting tool for cytological research.		
	$C_{29}H_{37}NO_5$ MW 479.6		
	CYTOCHALASIN C	1 mg	56.50
150770	[22144-76-9]		
0°C	From *Metarrhizium anisopliae*		
	Crystalline		
	$C_{30}H_{37}NO_6$ MW 507.6		
	CYTOCHALASIN D	1 mg	54.00
150771	[22144-77-0]	5 mg	192.00
0°C	From *Zygosporium mansonii*		
	Crystalline		
	$C_{30}H_{37}NO_6$ MW 507.6		
	CYTOCHALASIN E	1 mg	46.75
150772	[36011-19-5]	5 mg	154.00
0°C	From *Aspergillus clavatus*		
	Crystalline		
	$C_{28}H_{33}NO_7$ MW 495.6		

-D-

CATALOG NUMBER			U.S. $
	DAIDZEIN	20 mg	32.95
158812	[486-66-8]	100 mg	109.00
RT	(4′,7-Dihydroxyisoflavone)		
	Purity: >98%		
	A negative control for ICN Genistein[1] (tyrosine kinase inhibitor, Cat. No. 152355).		
	Ref: 1. Akiyama, T., et al., (1987), J. Biol. Chem., **262**, 5592.		
	MW 254.2		
	4-DAMP		
	See: 4-Diphenylacetoxy-N-methylpiperidine methiodide		
	DANAZOL	100 mg	27.30
151463	[17230-88-5]	250 mg	58.10
RT	(17β-Hydroxy-2,4,17α-pregnadien-20-yno[2,3-d]-isoxazole)	1 g	195.00
	$C_{22}H_{27}NO_2$ MW 337.5		
	4-DANSYLAMINOPHENYLMERCURIC ACETATE	1 mg	13.75
159763		5 mg	42.40
0-5°C	[53282-60-3]		
	(Maddocks' Reagent)		
	Very sensitive reagent for fluorometric determination of thiol groups.		
	Ref.: Maddocks and MacLachlan, The Lancet, **338**, 1043 (1991).		
	$C_{20}H_{20}N_2O_4SHg$ MW 585.0		
	DANTROLENE	25 mg	10.25
157521	[14663-23-1]	100 mg	36.50
RT	(1-[(5-[p-Nitrophenyl]-furfurylidene)amino]hydantoin)	250 mg	78.00
	Sodium Salt		
	Inhibits intracellular calcium release		
	$C_{14}H_9N_4O_5Na$ MW 336.2		
	7β-DEACETYL-7β-(γ-N-METHYLPIPERAZINO)BUTYRYL FORSKOLIN		
	See: Forskolin, 7β-deacetyl-7β-(γ-N-methylpiperazino)butyryl		
	DEBRISOQUIN SULFATE	10 mg	9.50
154278	White solid	50 mg	30.95
0°C	mp 273-275°C (dec)		
	Soluble in water: 2.9 g/100ml		
	Purity: 99%		
	$C_{10}H_{13}N_3$ • $1/2H_2SO_4$ MW 224.3		
	DECOYININE	1 mg	14.95
159025	(U 7984)	10 mg	126.10
0°C	**Purity: 99%**	25 mg	225.00
	An adenine-ketose antibiotic which specifically blocks GMP synthase. It decreases intracellular GTP levels.		
	Ref.: 1. Suhadolnick, R.J., Nucleoside antibiotics, 96-121 (1970). 2. Glazebrook, M.A., J. Gen. Microbiol., **136**, 581 (1990). 3. Fouet, A. and Sonenshein, A.L., J. Bacteriol., **172**, 835 (1990).		
	MW 279.2		
	6-(N-DECYLAMINO)-4-HYDROXYMETHYLINDOLE	1 mg	33.95
159578			
0°C	[123597-55-7]		
	(DHI)		
	Purity: 99%		
	Synthetic protein kinase C activator		
	$C_{19}H_{30}N_2O$ MW 302.5		
	5,6-DEHYDROARACHIDONIC ACID	10 µg	49.75
154279	[58688-54-3]	50 µg	195.00
-20°C	**Purity: 95%**	100 µg	350.00
	Solution in ethanol		
	Selective, irreversible inhibitor of 5-lipoxygenase.		
	$C_{20}H_{30}O_2$ MW 302.5		
	9,21-DEHYDRORYANODINE	1 mg	88.90
159662	[94513-55-0]		
RT	From *Ryania speciosa*		
	Purity: 96%		
	$C_{25}H_{33}NO_9$ MW 491.5		

CATALOG NUMBER			U.S. $
158898 0-5°C	**DELTAMETHRIN** [52918-63-5] (Decamethrin; (S)-α-cyano-3-phenoxybenzyl-(1R)-cis-3-(2,2-dibromvinyl)-2,2-dimethylcyclopropancarboxylate) This is a Type II pyrethrin and a potent inhibitor of calcineurin (protein phosphatase 2B). $C_{22}H_{19}Br_2NO_3$ MW 505.2	1 mg 10 mg 25 mg	10.00 77.10 183.75
190195 0-5°C	**DEMECOLCINE** [477-30-5] (N-Deacetyl-N-Methylcolchicine) **Crystalline** Used to immobilize chromosomes by inactivating the spindle fiber mechanism during metaphase. Binds tubulin and interferes with microtubule-dependent cell functions. **Ref.:** Ray, K., et al., Eur. J. Biochem., **142**, 577 (1984). $C_{21}H_{25}NO_5$ MW 371.4	1 mg 5 mg 10 mg 50 mg	19.90 48.50 86.50 340.00
158899 -20-0°C	**DENDROTOXIN** [74811-93-1] From *Dendroaspis angusticeps* Inhibits several outward voltage dependent K^+ channels, specifically the transient outward current (A current). **Ref.:** 1. Holliwell, J.V., et.al., Proc. Natl. Acad. Sci. USA, **83**, 493 (1986). 2. Dolly, J.O., Trends Neurosci., **11**, 186 (1988). 3. Castle, N.A., et.al., ibid., **12**, 59 (1989). 4. Scott, V.E.S., et.al., J. Biol. Chem., **265**, 20094 (1990).	100 µg	145.00
193942 -20°C	**DENDROTOXIN I** From *Dendroaspis p. polylepis* The most potent of all Dendrotoxins. **Ref.:** Benoit, et al., Brain Res., **377**, 374 (1986). MW 6936	140 µg	175.00
193939 -20°C	**β-DENDROTOXIN** From *Dendroaspis angusticeps* Selectively inhibits non-inactivated, voltage-gated, α-dendrotoxin-insensitive K^+ channels found in rat brain synaptosomes and voltage dependent delayed rectifier, K^+ current in vascular smooth muscle cells. **Ref.:** Benishin, et al., Mol. Pharmacol., **34**, 152 (1988). MW 7000	35 µg	189.25
150802 RT	**(+)-1-DEOXYMANNOJIRIMYCIN** [84444-90-6] (1,5-Dideoxy-1,5-imino-D-mannitol) **Hydrochloride** Inhibits processing of N-linked glycoproteins by inhibiting the action of mannosidases 1A/B. **Ref.:** Bischoff, J., et.al., J. Biol. Chem., **261**, 4766 (1986). $C_6H_{13}NO_4 \bullet HCl$ MW 199.6	1 mg 5 mg 10 mg	24.00 80.00 146.00
150819 0-5°C	**(+)-1-DEOXYNOJIRIMYCIN** [19130-96-2] (1,5-Dideoxy-1,5-imino-D-glucitol) **Hydrochloride** Interferes with normal processing of N-linked glycoproteins, producing reduced amounts of complex type oligosaccharides. **Ref.:** J. Biol. Chem., **257**, 14155 (1982). $C_6H_{13}NO_4 \bullet HCl$ MW 199.7	1 mg 5 mg 10 mg	23.00 76.00 135.00
159579 0°C	**12-DEOXYPHORBOL 13-ACETATE** [60857-08-1] (Prostratin) Isolated from strathmore weed Weak mouse ear irritant *POSSIBLE CARCINOGEN* $C_{22}H_{30}O_6$ MW 390.5	1 mg	86.00
159580 0°C	**12-DEOXYPHORBOL 13-ANGELATE** [28152-96-7] **Purity: 99%** *POSSIBLE CARCINOGEN* $C_{25}H_{34}O_6$ MW 430.6	1 mg	86.00
159581 0°C	**12-DEOXYPHORBOL 13-ANGELATE 20-ACETATE** [25090-72-6] **Purity: 99%** Weak tumor promoter (mouse skin), but moderately strong irritant *POSSIBLE CARCINOGEN* $C_{27}H_{36}O_7$ MW 472.6	1 mg	86.00
159583 0°C	**12-DEOXYPHORBOL 13-ISOBUTYRATE 20-ACETATE** [25090-71-5] **Purity: 99%** Very weak tumor promoter (mouse skin), but moderately strong irritant. *POSSIBLE CARCINOGEN* $C_{26}H_{37}O_7$ MW 460.6	1 mg	86.00
159584 0°C	**12-DEOXYPHORBOL 20-METHOXYTRITYL ETHER** [123597-60-4] **Purity: 96% min.** Intermediate for synthesis of 12-deoxyphorbol derivatives. *POSSIBLE CARCINOGEN* $C_{40}H_{44}O_6$ MW 620.8	1 mg	66.00
159585 0°C	**12-DEOXYPHORBOL 13-PHENYLACETATE** [58821-98-0] **Purity: 99%** *POSSIBLE CARCINOGEN* $C_{23}H_{34}O_6$ MW 466.6	1 mg	66.00
158902 -20-0°C	**12-DEOXYPHORBOL 13-PHENYLACETATE 20-ACETATE** [54662-30-5] (dPPA) **Purity: 99%** Specifically activates PKC β. More potent for the β isozyme than for the α, γ, δ, or ε. **Ref.:** Evans, F.J., et.al., Biochem. Soc. Trans., **19**, 397 (1991). MW 508.6	1 mg	86.00
151469 0°C	**D-(+)-DEPRENYL** (N,α-dimethyl-N-2 propynyl-benzeneethanamine) **Hydrochloride** Inactive enantiomer MW 223.8	10 mg 50 mg	26.00 106.15
158903 RT	**R-(-)-DEPRENYL** [14611-52-0] **Hydrochloride** **Purity: 98%** MAO-B inhibitor. Therapeutic agent for Parkinson's Disease. **Ref.:** 1. Tetrud, J.W. and Langston, J.W., Science, **245**, 519 (1989). 2. Lewin, R., Science, **230**, 527 (1985). MW 223.75	100 mg 250 mg 500 mg	20.75 46.50 80.75
157562 RT	**DEQUALINIUM CHLORIDE** [522-51-0] **Crystalline** $C_{30}H_{40}N_4Cl_2$ MW 527.6	1 g 5 g	13.80 44.75
153543 RT	**DESIPRAMINE** [58-28-6] (10,11-Dihydro-N-methyl-5H-dibenz-[b,f]azepine hydrochloride) **Hydrochloride** A norepinephrine uptake inhibitor. $C_{18}H_{23}ClN_2$ MW 302.8	250 mg 1 g	9.75 25.00

CATALOG NUMBER			U.S. $
158904 RT	**DESPROPIONYLFENTANYL** **Purity: 99%** Urinary metabolite of fentanyl. **Ref.:** Van Rooy, H., et.al., J. Chromatography, **223**, 85 (1981). MW 280.4	1 mg 5 mg	67.00 295.00
158905 RT	**DESPROPIONYL-3-METHYLFENTANYL** **Purity: 99%** Urinary metabolite of 3-methylfentanyl. **Ref.:** Hammargren, W.R. and Henderson, G.L., J. Anal. Toxicol., **12**, 183 (1988). MW 294.4	1 mg	86.00
190040 0-5°C	**DEXAMETHASONE** [50-02-2] (9α-Fluoro-16α-methylprednisolone) **Crystalline** $C_{22}H_{29}FO_5$ MW 392.5	25 mg 100 mg 500 mg 1 g 5 g	10.95 25.00 74.50 110.00 395.00
194560 0-5°C	**DEXAMETHASONE** [50-02-2] (9α-Fluoro-16α-methylprednisolone) **Cell Culture Reagent** **γ-Irradiated** **Crystalline** $C_{22}H_{29}FO_5$ MW 392.5	1 mg	19.85
194561 0-5°C	**DEXAMETHASONE** [50-02-2] (9α-Fluoro-16α-methylprednisolone) **Cell Culture Reagent** **Crystalline** $C_{22}H_{29}FO_5$ MW 392.5	25 mg 100 mg 500 mg 1 g	11.95 29.00 88.50 132.00
150820	**(+)-DEXETIMIDE** (3-phenyl-1′-(phenylmethyl)-[3,4′-bipiperidine]-2,6,-dione hydrochloride) **Hydrochloride** **Ref.:** (1) Spek, et al., Nature, **232**, 575 (1971); (2) De Smedt, et al., J. Clin. Pharmacol. **10**, 207 (1970).	1 mg 5 mg	21.05 31.80
153544 RT	**DEXTROMETHORPHAN** [125-69-9] (3-Methoxy-17-methyl-9α,13α,-14α-morphinan hydrobromide) **Hydrobromide** $C_{18}H_{25}NO \bullet HBr$ MW 352.3	250 mg 1 g 5 g	5.50 11.00 18.50
153741 RT	**DEXTRORPHAN-D-TARTRATE** [125-73-5] ((+)-3-Hydroxy-N-methylmorphinan-D-tartrate) Noncompetitive NMDA antagonist $C_{17}H_{23}NO \bullet C_4H_6O_6$ MW 407.47	50 mg 150 mg 250 mg	31.75 80.20 122.95
152409 0-5°C	**DIACYLGLYCEROL KINASE INHIBITOR I** [93076-89-2] (R59022; 6-[2-[4-[(4-fluorophenyl)phenyl-methylene]-1-piperidinyl]ethyl]-7-methyl-5H-thiazolo-[3,2-a]pyrimidin-5-one; DKI) The elevation of diacylglycerol became of major importance when diacylglycerol was shown to stimulate protein kinase C, making this lipid a candidate for a second messenger function in the signal transduction system. In intact cells, diacylglycerol is rapidly phosphorylated into phosphatidic acid by diacylglycerol kinase and reverses the protein kinase C activity. DKI was found to inhibit diacylglycerol kinase. In human red blood cell membranes and in intact platelets, the concentrations needed for half maximal inhibition ranged from 2 to 4 x 10^{-6}M. $C_{27}H_{26}N_3OSF$ MW 459.6	1 mg 5 mg	19.95 68.25
154284 0-5°C	**DIACYLGLYCEROL KINASE INHIBITOR II** [120166-69-0] (R59949; 3-[2-[4-[bis(4-fluorophenyl) methylene]-1-piperidinyl]ethyl]-2,3-dihydro-2-thioxo-4(1H)-quinazolinone) **Purity: 99%** Inhibitor of human platelet DAG kinase. More potent than R 59022. $C_{28}H_{25}F_2N_3OS$ MW 489.6	1 mg 5 mg	19.95 68.25
150835 0°C	**2,4-DIAMINO-6-HYDROXYPYRIMIDINE** [56-06-4] **Crystalline** **Purity: ~98%** A selective inhibitor of GTP cyclohydrolase I, and a suppressor of nitric oxide synthase. $C_4H_6N_4O$ MW 126.1	1 g 5 g 25 g	5.50 14.50 28.50
150839 RT	**2,3-DIAMINONAPHTHALENE** [771-97-1] 2,3-Naphthalenediamine) Used for determination of selenium. Also used for the detection of nitric oxide via a sensitive fluorometric assay of nitrite (NO_2^-). $C_{10}H_{10}N_2$ MW 158.2	250 mg 1 g 5 g	23.00 72.00 246.00
159765 RT	**N-(DIAMINOPHOSPHINYL)-4-FLUOROBENZAMIDE** [70788-28-2] (Flurofamine) Urease inhibitor $C_7H_9N_3O_2PF$ MW 217.1	1 mg 5 mg 25 mg	7.25 18.65 74.55
105485 0°C	**N^6, O^2-DIBUTYRYLADENOSINE-3′,5′-*cyclic*-MONOPHOSPHATE** [16980-89-5] **Sodium Salt** $C_{18}H_{23}N_5O_8PNa$ MW 491.4	25 mg 50 mg 100 mg 500 mg	20.75 30.20 53.00 238.55
105486 0°C	**N^2, 2′-O-DIBUTYRYLGUANOSINE-3′,5′-*cyclic*-MONOPHOSPHATE** [51116-00-8] (Dibutyryl-cGMP) **Sodium Salt** **Purity: 96%** Activates cGMP-dependent protein kinase and inhibits thrombin induced arachidonic acid release in human platelets. **Ref.:** 1. Meyer, R.B. and Miller, J.P., Life Sci., **14**, 1019 (1974). 2. Francis, S.G. et.al., ibid., **34**, 506 (1988). 3. Schultz, K.D., et. al., Naunyn-Schmiedeberg's Arch. Pharmacol., **306**, 1 (1979). 4. Sane, D.C, et.al., Biochem. Biophys. Res. Commun., **165**, 708 (1989). $C_{18}H_{23}N_5O_9PNa$ MW 507.4	1 mg 5 mg 10 mg 50 mg	14.85 46.00 85.00 392.00
157639 0°C	**5,6-DICHLOROBENZIMIDAZOLE RIBOSIDE** [53-85-0] (DRB; 5,6-Dichloro-1-β-D-ribofuranosylbenzimidazole) **Purity: 98%** Selectively inhibits casein kinase II. Blocks RNA synthesis by inhibiting RNA polymerase II transcription dependent on CK-II **Ref.:** Zandomeni, R., et.al., J. Biol. Chem., **261**, 3414 (1986). $C_{12}H_{12}Cl_2N_2O_4$ MW 319.1	1 mg 5 mg 10 mg 50 mg	7.50 23.50 39.15 150.00
159769 RT	**4,6-DICHLOROINDOLE-2-CARBOXYLIC ACID** Potent NMDA antagonist at the glycine site. Reportedly stronger than kynurenic acid. **Ref.:** Salituro, et al., J. Med. Chem., **33**, 2945 (1990). $C_9H_5NO_2Cl_2$ MW 230.1	1 mg 5 mg 25 mg	13.75 32.00 140.00

CATALOG NUMBER			U.S. $
158836 **0-5°C**	**3,4-DICHLOROISOCOUMARIN** [51050-59-0] Reversible inhibitor of serine proteases, including chymotrypsin, trypsin, clotting factors XIa and XIIa. Also inhibits some endopeptidase such as protease (Staph. V-8). Does not inhibit papain. **Ref:** Harper, J.W., et.al., Biochemistry, **24**, 1831 (1985). $C_9H_4O_2Cl_2$ MW 215	1 mg 5 mg 10 mg	28.50 115.00 199.75
158907 **RT**	**5,7-DICHLOROKYNURENIC ACID** [131123-76-7] **Purity: 99%** Potent antagonist at the glycine site NMDA receptor. **Ref.:** 1. Baron, B.M., et.al., Mol. Pharmacol., **38**, 554 (1990). 2. Leeson, P.D., et.al., J. Med. Chem., **34**, 1243 (1991). $C_{10}H_5NO_3Cl_2$ MW 258.1	05 mg 25 mg	14.95 54.00
159912 **RT**	***cis*-(±)-3,4-DICHLORO-N-METHYL-N-(2-[1-PYRROLIDINYL]CYCLOHEXYL)BENZENEACETAMIDE** [92953-41-8] (U-54494A) **Hydrochloride** **Purity: 98%** Potent NMDA antagonist **Ref.:** Sethy, V.H. and Sage, G.P., *Sage Neuropharmacol.*, **31**, 111 (1992). MW 391.8	1 mg 5 mg 10 mg	17.50 75.00 127.00
157646 **0-5°C**	***trans*-(±)-3,4-DICHLORO-N-METHYL-N-(2-[1-PYRROLIDINYL]CYCLOHEXYL) BENZENEACETAMIDE** [83913-06-8] (U-50488H) **Methanesulfonate Salt** A kappa opioid agonist **Ref.:** 1. Gillan, M.G.C. and Kosterlitz, H., Br. J. Pharmac., **77**, 461 (1982). 2. VonVoigtlander, P.F., et al., J. Pharm. Exp. Ther., **224**, 7 (1983). $C_{19}H_{26}Cl_2N_2O \bullet CH_4SO_3$ MW 465.4	10 mg 50 mg 100 mg	27.00 108.00 200.00
159770 **-20°C**	**5,7-DICHLOROTHIOKYNURENIC ACID** [135025-62-6] (5,7-Dichloro-4-mercaptoquinoline-2-carboxy lic acid) NMDA receptor antagonist. $C_{10}H_5NO_2SCl_2$ MW 274.1	1 mg 5 mg	8.95 26.25
157660 **RT**	**DICLOFENAC** [15307-79-6] (2-[(2,6-Dichlorophenyl)amino]-benzeneaceti c acid monosodium salt) **Sodium Salt** Cyclooxygenase inhibitor $C_{14}H_{10}Cl_2NO_2Na$ MW 318.1	10 g 25 g 100 g	22.05 49.00 155.00
158909 **-20-0°C**	**(±)-1,2-DIDECANOYLGLYCEROL (10:0)** [82950-64-9] (1,2-Didecanoyl-rac-glycerol (c10:0); 1,2-Dicaprin) **Purity: 98%** Promotes protein kinase C in platelets. **Ref.:** 1. Go, M., et.al., Biochem. Biophys. Res. Commun., **144**, 598 (1987). 2. Lapetina, E.G., et.al., J. Biol. Chem., **260**, 1358 (1985). $C_{23}H_{44}O_5$ MW 400.6	1 mg 5 mg	7.50 18.95
158910 **0°C**	**2′,5′-DIDEOXYADENOSINE** [6698-26-6] **Purity: 98%** Inhibitor of adeylate cyclase. **Ref.:** Holgate, S.T., et.al., Proc. Natl. Acad. Sci. USA, **77**, 6800 (1980). $C_{10}H_{13}N_5O_2$ MW 235.2	1 mg 5 mg 10 mg 25 mg	29.00 125.00 215.00 475.00

CATALOG NUMBER			U.S. $
157667 **0°C**	**2′,3′-DIDEOXYADENOSINE 5′-TRIPHOSPHATE** [93939-70-9] **Lithium Salt** **Purity: 85%** 1 mg is approx. 2 µmoles. Inhibits chain elongation typically catalyzed by DNA polymerase I. **Ref.:** Sanger, F., et al., Proc. Nat. Acad. Sci. USA, **74**, 5463 (1977).	1 mg 5 mg	72.00 315.00
157668 **0°C**	**2′,3′-DIDEOXYCYTIDINE 5′-TRIPHOSPHATE** [93939-77-6] **Lithium Salt** **Purity: 85%** 1 mg is approx. 2 µmoles. Inhibitor of DNA polymerase I - catalyzed chain elongation. **Ref.:** Sanger, F., et al., Proc. Nat. Acad. Sci. USA, **74**, 5463 (1977).	1 mg 5 mg	120.00 450.00
	1,9-DIDEOXYFORSKOLIN *See*: Forskolin, 1,9-dideoxy		
157669 **0°C**	**2′,3′-DIDEOXYGUANOSINE 5′-TRIPHOSPHATE** [93939-69-6] **Lithium Salt** **Purity: 90%** 1 mg is approx. 2 µmoles. Inhibitor of DNA polymerase I - catalyzed chain elongation. **Ref.:** Sanger, F., et al., Proc. Nat. Acad. Sci. USA, **74**, 5463 (1977).	1 mg	131.70
158911 **0-5°C**	**1,4-DIDEOXY-1,4-IMINO-D-MANNITOL** [100937-52-8] **Purity: 99%** Mannosidase inhibitor. **Ref.:** Fleet, G.W.J., et.al., J. Chem. Soc. Chem. Commun., 1240 (1984). MW 163.2	1 mg	91.70
193644 **0-5°C**	**DIETHYLAMINE *bis*(NITRIC OXIDE) ADDUCT** Releases Nitric Oxide (NO) into aqueous solutions. $C_8H_{22}N_4O_2$ MW 206.3	1 mg 5 mg 25 mg	7.50 26.45 110.00
158912 **RT**	**3β-(2-DIETHYLAMINO-ETHOXY)ANDROSTENONE** (U-18666A) **Hydrochloride** **Purity: 99%** Inhibits 2,3-oxidosqualene-lanosterol cyclase activity prohibiting the biosynthesis of cholesterol. Also demonstrates inhibition of the intracellular transport of LDL-Cholesterol in CHO cells. **Ref.:** 1. Sexton, R.C., et.al., Biochemistry, **22**, 5687 (1983). 2. Liscum, L. and Faust, J., J. Biol. Chem., **264**, 11796 (1989). MW 424.1	1 mg 5 mg	10.75 43.95
153738 **RT**	**10-(α-DIETHYLAMINO-PROPIONYL)-PHENOTHIAZINE Hydrochloride** $C_{19}H_{22}N_2OS \bullet HCl$ MW 362.9	25 mg 50 mg 100 mg	26.10 47.70 86.75
150889 **0°C**	**DIETHYLDITHIOCARBAMIC ACID** [20624-25-3] **Trihydrate** **Sodium Salt** **Crystalline** Reagent for copper determination. Also inhibits induction of macrophage nitric oxide synthase. $C_5H_{10}NS_2Na \bullet 3H_2O$ MW 225.3	10 g 50 g 100 g 500 g	10.00 21.45 35.70 143.30
153739 **0-5°C**	**1,3-DIETHYL-8-PHENYLXANTHINE** [75922-48-4] A_1 Adenosine receptor antagonist $C_{15}H_{16}N_4O_2$ MW 284.3	25 mg 50 mg 100 mg	28.85 55.70 101.25

CATALOG NUMBER			U.S. $
158913 -20°C	**N^1, N^{12}-DIETHYLSPERMINE Tetrahydrochloride** **Purity: 98%** Demonstrates antineoplastic activity. Inhibitor of polyamine synthesis. **Ref.:** Porter, C.W., et.al., Biochem. J., **268**, 207 (1990). MW 404.3	1 mg 10 mg	12.75 64.20
193645 0-5°C	**DIHYDREXIDINE Hydrochloride** A potent D_1 dopamine agonist that exhibits no agonist activity at D_2 receptors. **Ref.:** Kohli, et al., Eur. J. Pharmacol., **235**, 31 (1993). $C_{17}H_{17}NO_2$ • HCl MW 303.8	1 mg	30.85
	DIHYDROCAPSAICIN *See*: 8-Methyl-N-vanillylnonanamide		
159771 RT	**DIHYDROERGOCRYSTINE** [24730-10-7] **Methanesulfonate Salt** A 5-HT receptor antagonist. $C_{35}H_{41}N_5O_5$ • CH_3SO_3H MW 707.8	25 mg	28.65
159772 RT	**DIHYDROERGOTAMINE** [11032-41-0] **Methanesulfonate Salt** A 5-HT antagonist. $C_{33}H_{37}N_5O_5$ • CH_3SO_3H MW 679.8	10 mg 25 mg 100 mg	9.75 18.50 58.25
153740 -20-0°C	**3,4-DIHYDROXYBENZYLAMINE** [16290-26-9] **Hydrobromide** $C_7H_9NO_2$ • HBr MW 220.1	25 mg 100 mg 250 mg	7.30 13.50 28.95
153737 0-5°C	**R(-)-2,11-DIHYDROXY-10-METHOXYAPORPHINE** [6032-66-2] ((-)-Morphothebaine HCl) **Hydrochloride** Dopamine receptor agonist $C_{18}H_{19}NO_3$ • HCl MW 333.8	1 mg 5 mg 25 mg	7.95 15.00 31.50
101578 RT	**L-β-3,4-DIHYDROXYPHENYL-ALANINE** [59-92-7] (L-Dopa, L-3-Hydroxytyrosine) **Purity: 99%** **Crystalline** Used in treatment of Parkinsonism. Also an inhibitor of tyrosine aminotransferase. $C_9H_{11}NO_4$ MW 197.2	250 mg 1 g 5 g 25 g 100 g 500 g	4.95 9.95 18.50 68.75 268.00 650.00
16032 0-5°C	**DL-3,4-DIHYDROXYPHENYLALANINE, [Alanine-1-^{14}C]** (DL-Dopa) 3,4-$(OH)_2C_6H_3CH_2CH(NH_2)$**C**OOH Sp. Act. 50-60 mCi/mmol 1.85-2.22 GBq/mmol Ethanol solution MW 197.2	50 µCi	459.65
26030 0-5°C	**L-3,4-DIHYDROXYPHENYLALANINE, [Ring-2,5,6-^{3}H]** (L-Dopa) Sp. Act. 20-60 Ci/mmol 0.74-2.22 TBq/mmol 0.01N KH_2PO_4 solution (pH 3.0). 3,4-$(OH)_2C_6$**H**$_3CH_2CH(NH_2)COOH$ MW 197.2	250 µCi 1 mCi	593.05 1332.80
26033 0-5°C	**3,4-DIHYDROXYPHENYL-ETHYLAMINE, [8-^{3}H(N)]** (Dopamine) Sp. Act. 15-30 Ci/mmol 0.555-1.11 TBq/mmol Ethanol solution. *Please call for delivery information.* 3,4-$(OH)_2C_6H_3CH_2CH_2NH_2$ MW 153.0	250 µCi 1 mCi	302.00 605.15
16029 0-5°C	**3,4-DIHYDROXYPHENYL-ETHYLAMINE, [8-^{14}C]** (Dopamine) Sp. Act. 40-60 mCi/mmol 1.48-2.22 GBq/mmol Ethanol solution. *Please call for delivery information.* 3,4-$(OH)_2C_6H_3CH_2CH_2NH_2$ MW 153.0	250 µCi 1 mCi	969.00 2060.45
26031 0-5°C	**3,4-DIHYDROXYPHENYL-ETHYLAMINE, [7,8-^{3}H(N)]** (Dopamine) Sp. Act. 30-60 Ci/mmol 1.11-2.22 TBq/mmol Ethanol solution. *Please call for delivery information.* 3,4-$(OH)_2C_6H_3CH_2CH_2NH_2$ MW 153.0	250 µCi 1 mCi 5 mCi	217.10 447.50 1332.80
26032 0-5°C	**3,4-DIHYDROXYPHENYL-ETHYLAMINE, [7-^{3}H(N)]** (Dopamine) Sp. Act. 15-30 Ci/mmol 0.555-1.11 TBq/mmol Ethanol solution. *Please call for delivery information.* 3,4-$(OH)_2C_6H_3CH_2CH_2NH_2$ MW 153.0	250 µCi 1 mCi	302.00 605.15
101580 0-5°C	**3,4-DIHYDROXYPHENYL-ETHYLAMINE** [62-31-7] (Dopamine, 3-Hydroxytyramine) **Hydrochloride** **Purity: 99%** **Crystalline** Precursor of adrenaline. $C_8H_{11}NO_2$ • HCl MW 189.6	1 g 5 g 25 g	11.15 33.00 145.50
153736 RT	**(±)-*threo*-DIHYDROXY-PHENYLSERINE** [3916-18-5] (±-*threo*-DOPS) Noradrenaline precursor which elevates noradrenaline concentrations in the brain. $C_9H_{11}NO_5$ MW 213.2	1 mg 5 mg 25 mg	8.95 17.00 35.00
158915 -20°C	**24(R),25-DIHYDROXYVITAMIN D_3** **Purity: 99%** A significant vitamin D_3 metabolite. Also, mediates homeostasis between calcium and phosphorus. **Ref.:** 1. DeLuca, H.F. and Schroes, H.K., Annu. Rep. Med. Chem., **19**, 179 (1984). 2. Norman, A.W., Life Sci., **27**, 229 (1980). MW 416.6	50 µg	347.75
159774 RT	**DILAZEP** [35898-87-4] Inhibits adenosine uptake and platelet aggregation; Coronary vasodilator. $C_{31}H_{44}N_2O_{10}$ MW 604.7	1 mg 5 mg	12.50 31.00
151496 0-5°C	**DILTIAZEM** [33286-22-5] (*cis*-(+)-3-(Acetyloxy)-5-[2-(dimethyl-amino)ethyl]-2,3-dihydro-2-(4-methoxy-phenyl)-1,5-benzothiazepin -4(5H)-one) **Hydrochloride** Calcium antagonist. Diltiazem HCl has been found to inhibit contraction of smooth muscles, especially coronary arteries. **Crystalline** $C_{22}H_{26}N_2O_4S$ • HCl MW 451	1 g 5 g 10 g	31.25 118.50 211.95
153733 RT	**DIMAPRIT** [23256-33-9] (S-(3-Dimethylaminopropyl)-isothiourea dihydrochloride) **Dihydrochloride** H_2 Histamine agonist $C_6H_{15}N_3S$ • 2HCl MW 234.2	1 mg 5 mg 25 mg	8.00 17.00 35.00

CATALOG NUMBER			U.S. $
150921 RT	**3,4-DIMETHOXY-PHENETHYLAMINE** [120-20-7] (Homoveratrylamine) Catecholamine involved in schizophrenia. **Ref.:** Nature, **231**, 22 (1971). 1 ml = 1.07 g $C_{10}H_{15}NO_2$ MW 181.2	5 ml 10 ml 25 ml 100 ml	5.00 7.40 16.00 43.70
153583 0-5°C	**2-(2,6-DIMETHOXYPHENOXY-ETHYL)AMINOMETHYL-1,4-BENZODIOXANE** [613-67-2] (WB-4101) **Hydrochloride** An α-adrenergic antagonist **Ref.:** Norman, A.B., Molec. Pharmacol., **28**, 487 (1985). $C_{19}H_{23}NO_5$ • HCl MW 381.9	10 mg 25 mg 100 mg	7.50 15.00 51.00
159727 RT	**N,N-*bis*-(3,4-DIMETHOXY-PHENYLETHYL)-N-METHYLAMINE** [33978-72-2] (YS-035) **Hydrochloride** A calcium blocker that also inhibits potassium outward currents. $C_{21}H_{29}NO_4$ • HCl MW 395.9	1 mg 5 mg	13.75 42.40
193647 RT	**N^6-[2-(3,5-DIMETHOXYPHENYL)-2-(2-METHYLPHENYL)ETHYL]ADENOSINE** [120442-40-2] (DPMA) An A_2 adenosine receptor agonist. $C_{27}H_{31}N_5O_6$ MW 521.3	1 mg 5 mg 25 mg	14.75 29.50 125.00
	3,5-DIMETHYLADAMANTAN-1-AMINE *See*: Memantine		
	4-(N,N-DIMETHYLAMINO)BUTYLISOTHIOUREA *See*: SK & F 91488		
101593 0°C	**6-DIMETHYLAMINOPURINE** [938-55-6] (N^6,N^6-Dimethyladenine) **Crystalline** **Purity: ≥98%** Protein kinase inhibitor. **Ref.:** Szollosi, M.S., et al., Jour. of Cell Sci., **37(23)**, 3886-3888 (1993). $C_7H_9N_5$ MW 163.2	100 mg 250 mg 500 mg 1 g	14.25 28.00 45.50 74.75
158916 0-5°C	**1,4-DIMETHYLENDOTHALL** [109282-27-1] $C_{10}H_{14}O_5$ MW 214.2	1 mg 10 mg	11.50 57.05
193649 RT	**3,7-DIMETHYL-1-PROPARGYLXANTHINE** [14114-46-6] (DMPX) Selective A_2 adenosine receptor antagonist. $C_{10}H_{10}N_4O_2$ MW 218.2	1 mg 5 mg 25 mg	17.75 68.35 296.95
	1,3-DIMETHYLXANTHINE *See*: Theophylline		
153723 RT	**3,5-DINITROCATECHOL** [7659-29-2] (3,5-Dinitro-1,2-benzenediol) Catechol O-methyl transferase (COMT) inhibitor $C_6H_4N_2O_6$ MW 200.1	1 mg 5 mg 25 mg	11.00 35.00 122.90
159776 RT	**5,7-DINITROQUINOXALINE-2,3-DIONE** [125910-83-0] (MNQX) Shows preferential antagonist activity at NMDA receptors. $C_8H_4N_4O_6$ MW 252.1	1 mg 5 mg	30.95 123.80
158807 RT	**6,7-DINITROQUINOXALINE-2,3-DIONE** [2379-57-9] (DNQX) **Purity: >98%** Selective non-NMDA receptor antagonist. **Ref:**1. Honore, T., et al., (1988), Science, **241**, 701. $C_8H_4N_4O_6$ MW 252.1	10 mg 50 mg	36.75 162.00
154226 0-5°C	**sn-1,2-DIOCTANOYLGLYCEROL** [60514-48-9] **Purity: ≥98%** *Shipped with dry ice to reduce isomerization on request only.* $C_{19}H_{36}O_5$ MW 344.6	1 mg 5 mg 10 mg 50 mg 100 mg	10.50 25.50 44.25 114.00 192.15
159589 0-5°C	**DIOCTANOYLGLYCOL** Inhibitor for diacylglycerol kinase. **Ref.:** Bishop, et al., *J. Biol. Chem*., **26**, 6993 (1986). $C_{18}H_{34}O_4$ MW 314.5	25 mg 100 mg	18.35 64.20
158918 -20-0°C	**(±)-DIOLEOYLGLYCEROL (18:1)** [3738-74-7] (1,2-Dioleoyl-rac-glycerol (c18:1, [cis]-9); 1,2-Di[cis-9-octadecenoyl]-rac-glycerol) **Purity: 98%** *Shipped in dry ice to minimize isomerization* $C_{39}H_{72}O_5$ MW 621	1 mg 5 mg 20 mg	12.95 26.50 86.00
16028 0-5°C	**DIOLEOYL-*rac*-GLYCEROL, [Oleoyl-1-^{14}C]** (Diolein) Sp. Act. 1-5 mCi/mmol 37-185 GBq/mmol Ethanol:toluene (1:1) solution. *Please call for delivery information.* MW 621.0	50 µCi 250 µCi	459.65 1211.55
153720 0-5°C	**(+)-*cis*-DIOXOLANE** [16709-43-6] (L(+)-*cis*-2-methyl-4-trimethyl-ammoniummethyl-1,3-dioxolane iodide) This product is a 60:40 mixture of *cis,trans* diastereomers as determined by NMR. $C_8H_{18}INO_3$ MW 287.1	1 mg 5 mg	19.00 76.00
190044 RT	**DIPHENHYDRAMINE** [147-24-0] (N-[2-Diphenylmethoxyethyl]-N,N-dimethylamine) **Hydrochloride** **Crystalline** Histamine H_1 receptor antagonist $C_{17}H_{21}NO$ • HCl MW 291.8	10 g 50 g 100 g	14.00 15.85 27.45
158793 RT	**4-DIPHENYLACETOXY-N-METHYL-PIPERIDINE METHIODIDE** [1952-15-4] (4-DAMP) M_3 muscarinic receptor antagonist. **Purity: >98%** **Ref:** 1. Barlow, R.B. & Shepherd, M.K., (1986), Br. J. Pharmacol., **89**, 837. 2. Michel, A.D., et al., (1989), Eur. J. Pharmacol., **166**, 459. MW 451.4	1 mg 5 mg 25 mg 100 mg	7.95 19.00 38.75 129.50
	DIPHENYLAMINE-2-CARBOXYLIC ACID *See*: N-Phenylanthranilic acid		
193650 -20°C	**DIPHENYLENEIODONIUM CHLORIDE** [4673-26-1] **Purity: ≥98%** A powerful inhibtor of important enzymes including NADH reductase, Oxidase and endothelial Nitric Oxide Synthase. **Ref.:** Dodd-O, J.M., et al., Brit. Jour. of Pharmacol., **120(5)**, 857-864 (1997). $C_{12}H_8ClI$ MW 314.6	5 mg 25 mg	18.00 71.85
193651 -20°C	**DIPHENYLENEIODONIUM SULFATE** A Nitric Oxide Synthase inhibitor. $C_{12}H_{18}I$ • 1/2 SO_4 MW 327.1	5 mg 25 mg 50 mg	17.65 52.90 94.80

CATALOG NUMBER			U.S. $
153719 0-5°C	**1,3-DIPROPYL-8-(2-AMINO-4-CHLOROPHENYL)-XANTHINE** [85872-51-1] (PACPX) Adenosine antagonist. $C_{17}H_{19}ClN_5O_2$ MW 361.8	1 mg 5 mg 10 mg 25 mg	13.25 41.25 75.05 147.75
153718 -20-0°C	**(±)-2-DIPROPYLAMINO-6,7-DIHYDROXY-1,2,3,4-TETRAHYDRONAPHTHALENE** [62421-17-4] (Dipropyl-6,7-ADTN HBr) **Hydrobromide** Dopamine agonist $C_{16}H_{25}NO_2 \bullet HBr$ MW 344.3	1 mg 5 mg 10 mg	14.00 55.00 96.75
153724 -20-0°C	**N,N-DIPROPYL-5-CARBOXAMIDOTRYPTAMINE** (3-(N,N-Dipropylaminoethyl)-1H-indole-5-carboxamide maleate) **Maleate Salt** $C_{17}H_{25}N_3O \bullet C_4H_4O_4$ MW 403.5	1 mg	54.70
153725 0-5°C	**DIPROPYLDOPAMINE** **Hydrobromide** Dopamine receptor agonist $C_{14}H_{23}NO_2 \bullet HBr$ MW 318.2	10 mg 50 mg 100 mg 250 mg	15.95 62.90 72.25 120.65
153726 RT	**1,3-DIPROPYL-7-METHYLXANTHINE** [31542-63-9] $C_{12}H_{18}N_4O_2$ MW 250.3	1 mg 5 mg 10 mg 25 mg	11.25 36.15 43.35 65.10
159779 RT	**1,3-DIPROPYL-8-PHENYLXANTHINE** Selective A_1 adenosine antagonist. $C_{17}H_{20}N_4O_2$ MW 312.4	1 mg 5 mg 25 mg	16.50 54.00 225.00
153657 0-5°C	**1,3-DIPROPYL-8-p-SULFOPHENYLXANTHINE** [89073-57-4] $C_{17}H_{20}N_4O_5S$ MW 392.4	5 mg 10 mg 25 mg	36.15 65.10 143.15
153722 RT	**DIPYRIDAMOLE** [58-32-2] (2,2′,2″,2‴-(4,8-Dipiperidino-pyrimido [5,4-d] pyrimidine-2,6-diyldinitrilotetraethanol) Selective inhibitor of cGMP phosphodiesterase and inhibits nucleoside transport into mammalian cells. $C_{24}H_{40}N_8O_4$ MW 504.6	1 g 5 g 10 g 25 g	12.65 37.50 61.00 120.00
153721 RT	**1,3-DI(2-TOLYL)GUANIDINE** [97-39-2] $C_{15}H_{11}N_3$ MW 239.3	1 g 5 g	11.50 39.50
	DMPP *See*: 1,1-Dimethyl-4-phenylpiperazinium iodide		
	DNQX *See*: 6,7-Dintroquinoxaline-2,3-dione		
159780 RT	**DOBUTAMINE** [49745-95-1] **Hydrochloride** β_1-Adrenergic agonist. $C_{18}H_{23}NO_3 \bullet HCl$ MW 337.8	1 mg 5 mg 10 mg 50 mg	8.25 16.25 24.75 98.25
157890 0°C	**DOMOIC ACID** [14277-97-5] **Purity: 95%** Reported to be a potent glutamate agonist. **Ref.:** Briscoe, T.J., et al., British J. Pharmacol., **58**, 373 (1976). $C_{13}H_{21}NO_6$ MW 311.1	0.5 mg 1 mg 5 mg	53.40 88.90 295.00
153709 RT	**DOMPERIDONE** [57808-66-9] (5-Chloro-1-[1-[3-(2,3-dihydro-2-oxo-1H-benzimidazol-1-yl)propyl]-4-piperidinyl]-1,3-dihydro-2H-benzimidazol-2-one) $C_{22}H_{24}ClN_5O_2$ MW 425.9	5 mg 15 mg 25 mg 50 mg 250 mg	12.25 24.55 38.35 72.25 299.00
151016 RT	**DOXEPIN** [1229-29-4] (3-Dibenz(b,c)oxepin 11(6H)ylidene-N,N-dimethyl-1-propanamine) **Hydrochloride** White crystalline powder $C_{19}H_{21}NO \bullet HCl$ MW 315.8	1 g 5 g 10 g 50 g	19.75 64.95 108.00 285.00
159101 RT	**DOXORUBICIN** [25316-40-9] (Adriamycin; 14-Hydroxydaunomycin, HCl) **Hydrochloride** **Purity: >95%** by HPLC Chemotherapeutic agent. Antitumor, immunosuppressive, and antibiotic agent. Blocks RNA polymerase and reverse transcriptase. Also inhibits nucleic acid synthesis. **Ref.:** 1. McLoon, L.K., et.al., Invest. Ophthamol. Vis. Sci., **32**, 1667 (1991) 2. Ellis, C.N., et.al., Biochem. J., **245**, 309 (1987). $C_{27}H_{29}NO_{11} \bullet HCl$ MW 580	1 mg 5 mg 10 mg 50 mg	16.75 66.25 112.50 475.00
	DPMA *See*: N^6-[2-(3,5-Dimethoxyphenyl)-2-(2-methylphenyl)ethyl]adenosine		
	DSS *See*: 3-(Trimethylsilyl)-1-propanesulfonic acid		

-E-

CATALOG NUMBER			U.S. $
152846 -20-0°C	**E-64** [66701-25-5] (trans-Epoxysuccinyl-leucylamido-[4-guanidino]butane; [L-3-trans-carboxyoxiran-2-carbonyl]-Leu-agmatin) Inhibitor for thiol protease. **Ref:** 1. Hanada, A., et al., Agric. Biol. Chem., **42**, 529 (1978). 2. Barrett, A.J., et al., Biochem. J., **201**, 189 (1982). $C_{15}H_{27}N_5O_5$ MW 357.4	1 mg 5 mg 10 mg	18.00 59.00 100.00
195985 0-5°C	**E-64c** [76684-89-4] ([2S,3S]-*trans*-Epoxysuccinyl-L-leucylamido-3-methylbutane) Inhibitor for thiol protease. $C_{15}H_{26}N_2O_5$ MW 314.4	1 mg	64.00
157894 0-5°C	**EBELACTONE A** [76808-16-7] (3,11-Dihydroxy-2,4,6,8,10,12-hexamethyl-9-oxo-6-tetradecenoic acid 1,3-lactone) Inhibitor for esterase, lipase and N-formyl-methionine aminopeptidase. **Ref.**: Uotani, K., et al., J. Antibiotics, **35**, 1670 (1982). $C_{20}H_{34}O_4$ MW 338.5	1 mg	56.00
157895 0-5°C	**EBELACTONE B** [76808-15-6] (2-Ethyl-3,11-dihydroxy-4,6,8,10,12-pentamethyl-9-oxo-6-tetradecenoic acid 1,3-lactone) Inhibitor for esterase, lipase and N-formyl-methionine aminopeptidase. **Ref.**: Uotani, K., et al., J. Antibiotics, **35**, 1670 (1982). $C_{21}H_{36}O_4$ MW 352.5	1 mg	37.25

CATALOG NUMBER			U.S. $
158809 0°C	**EBSELEN** [60940-34-3] (2-Phenyl-1,2-benzisoselenazol-3(2H)-one) **Purity: >99%** Novel selenium-containing anti-flammatory agent. Inhibits 5-LO, CO, NADPH oxidase, and protein kinase C. Potent antioxidant. Possesses a unique glutathione peroxidase-like activity. Also shown to be an inhibitor of free radical induced apoptosis and neuroprotective agent. **Ref:** Cotgreave, I.A., et al., (1989), Biochem. Pharmacol., **38**, 649. $C_{13}H_9NOSe$ MW 274.2	20 mg 100 mg	47.00 151.00
159102 0°C	**8,11-EICOSADIYNOIC ACID** (EDYA) **Purity: 98%** Blocks arachidonic activity. **Ref.:** Laposata, M., et.al., Prostaglandins, **33**, 603 (1987). MW 304.5	1 mg	65.00
151027 0°C	***cis*-5,8,11,14,17-EICOSA-PENTAENOIC ACID** [10417-94-4] (EPA) This is the crucial eicosanoid precursor made available now as a high purity grade, purified by HPLC. **Free Acid** **Purity: 99%** 10 mg/ml in ethanol May contain <0.1% arachidonic acid. $C_{20}H_{30}O_2$ MW 302.5	10 mg 100 mg	45.00 265.00
16018 0-5°C	**5,8,11-EICOSAPENTAENOIC ACID [1-^{14}C]** Sp. Act. 40-60 mCi/mmol 1.48-2.22 GBq/mmol Ethanol solution. *Please call for delivery information.* $CH_3CH_2(CH{=}CHCH_2)_5(CH_2)_2$**C**OOH MW 306.2	10 µCi 50 µCi	265.60 641.55
16019 0-5°C	**8,11,14-EICOSAPENTAENOIC ACID [1-^{14}C]** Sp. Act. 40-60 mCi/mmol 1.48-2.22 GBq/mmol Ethanol solution. *Please call for delivery information.* $CH_3CH_2(CH{=}CHCH_2)_5(CH_2)_2$**C**OOH MW 306.2	10 µCi 50 µCi	265.60 641.55
16017 0-5°C	**5,8,11,14,17-EICOSAPENTAENOIC ACID [1-^{14}C]** Sp. Act. 40-60 mCi/mmol 1.48-2.22 GBq/mmol Ethanol solution. *Please call for delivery information.* $CH_3CH_2(CH{=}CHCH_2)_5(CH_2)_2$**C**OOH MW 302.5	10 µCi 50 µCi	544.55 1090.25
26034 0-5°C	**EICOSAPENTAENOIC ACID [5,6,8,9,11,12,14,15,17,18-^{3}H]** Sp. Act. 100-200 Ci/mmol 3.70-7.40 TBq/mmol Ethanol solution. *Please call for delivery information.* $CH_3CH_2(CH{=}C$**H**$CH_2)_5(CH_2)_2$COOH MW 302.5	50 µCi 250 µCi 1 mCi	314.10 847.70 2060.45

CATALOG NUMBER			U.S. $
151508 0°C	**5,8,11,14-EICOSATETRAYNOIC ACID** [1191-85-1] (ETYA; Octadehydroarachidonic acid) Supplied as a white solid **Purity: 98%** Archidonic acid, cyclooxygenase, lipoxygenase, and cytochrome P^{450} inhibitor **Ref.:** 1. Salari, H., et.al., Prostagland. Leukotrienes Med., **13**, 53 (1984). 2. Taylor, A.S., et.al., Prostaglandins, **29**, 449 (1985). 3. Bokoch, G.M., et.al., J. Biol. Chem., **256**, 4156 (1982). 4. Tobias, L.D., et.al., Lipids, **14**, 181 (1979). 5. Falck, J.R., et.al., Biochem. Biophys. Res. Commun., **114**, 743 (1983). $C_{20}H_{24}O_2$ MW 296.4	5 mg 25 mg 50 mg	56.00 188.00 315.00
159104 0°C	***cis*-5,8,11-EICOSATRIENOIC ACID** [20590-32-3] (MEAD acid; Eicosa-5z,8z,11z-trienoic acid, 20:3, n-9) **Free Acid** **Purity: 95%** Demonstrates immunomodulatory and anti-inflammatory activity. **Ref.:** 1. Lefkowith, J.B., Adv. Prostagland. Thromboxane Leukotriene Res., **20**, 224 (1990). 2. Schreiner, G.F., et.al., Science, **240**, 1032 (1988). $C_{20}H_{34}O_2$ MW 306.5	1 mg 5 mg 10 mg	58.50 263.00 420.00
159105 0°C	***cis*-5,8,11-EICOSATRIENOIC ACID METHYL ESTER** [14602-39-2] (Mead acid methyl ester) **Purity: 99%** $C_{21}H_{36}O_2$ MW 320.5	1 mg	87.00
159106 0-5°C	**5,8,11-EICOSATRIYNOIC ACID** [13488-22-7] (ETI) **Purity: 98%** Specific lipoxygenase inhibitor. **Ref.:** 1. Salari, H., et.al., Prostagland. Leukotrienes Med., **13**, 53 (1984). 2. Hammarstrom, S., Biochim. Biophys. Acta., **477**, 517 (1977). 3. Hammarstrom, S., et.al., J. Biol. Chem., **255**, 8023 (1980) $C_{20}H_{28}O_2$ MW 300.4	1 mg 5 mg 10 mg	74.55 332.55 630.65
152847 -20-0°C	**ELASTATINAL** [51798-45-9] **Source/Species:** Microbial **Purity: 50%.** Inhibitor for elastase. **Ref:** Umezawa, H., et al., **26**, 787 (1983). $C_{21}H_{36}N_8O_7$ MW 512.6	1 mg 5 mg 10 mg	21.45 52.00 86.00
190453 0-5°C	**EMODIN** [518-82-1] (1,3,8-Trihydroxy-6-methylanthraquinone) **From Frangula Bark** **Purity: ~98%** A protein tyrosine kinase inhibitor. $C_{15}H_{10}O_5$ MW 270.2	50 mg 250 mg	35.00 115.00
158919 0-5°C	**ENDOTHALL** [145-73-3] (Endothal) A moderately potent inhibitor of protein phosphatase 2A. $C_8H_{10}O_5$ MW 186.16	25 mg 50 mg	34.65 66.20
158920 0-5°C	**ENDOTHALL THIOANHYDRIDE** [109282-38-4] A potent inhibitor of protein phosphatase 2A. $C_8H_8O_3S$ MW 184.2	1 mg 5 mg	71.10 338.50
152833 -20-0°C	***prepro*-ENKEPHALIN, Fragment 128-140** [88878-74-4] (Gly-Gly-Glu-Val-Leu-Gly-Lys-Arg-Tyr-Gly-Gly-Phe-Met) **Source/Species:** Ovine, bovine Carboxy terminal portion of peptide F. **Ref:** Micanovic, R., et al., Biochem. Biophys. Res. Commun., **118**, 299 (1984).	0.1 mg 0.5 mg 1 mg	29.70 99.05 159.80

CATALOG NUMBER | | | U.S. $

159918 **-20°C**
(±)-EPIBATIDINE 1 mg 99.00
[140111-52-0]
From Poison Frog Skin
Isolated from *Epipedobates tricolor*
Purity: 99%
Most potent agonist to the nicotinic acetylcholine receptor known. Both enantiomers have high affinity for nicotinic receptors in rat brain membranes.
Ref.: 1. Spande, T.F., et al., *J. Am. Chem. Soc.*, **114**, 3475 (1992).
2. Qian, C., et al., *Eur. J. Pharmacol.*, **250**, R13 (1993).
3. Badio, B. and Daly, J.W., *Mol. Pharmacol.*, **45**, 563 (1994).
$C_{11}H_{13}N_2Cl$ MW 208.7

691281 **-20°C**
EPIDERMAL GROWTH FACTOR RECEPTOR 100 µg 416.75
MONOCLONAL ANTIBODY
Anti-Human
Clone: c11
Isotype: Ig fraction from mouse ascites
Conc/Titer: 1:1,000
Applications: Immunoblotting; ELISA; Immunohistochemistry
The original immunogen was a synthetic peptide corresponding to a thirty residue region of the EGF receptor. The antibody reacts strongly with the EGF receptor in human cell lines and does not react with other phosphorylated proteins.

EPIDERMAL GROWTH FACTOR RECEPTOR, Activated
MONOCLONAL ANTIBODY
Anti-Human
Clone: 74
Isotype: Ig fraction from mouse ascites
Conc/Titer: 1:1,000
Applications: Immunoblotting; ELISA; Immunohistochemistry; Immunocytochemistry
The original immunogen was tyrosine-phosphorylated EGF receptor. The antibody reacts strongly and preferentially with the activated and phosphorylated EGF receptor in human cell lines and does not react with other phosphorylated proteins.
691292 50 µg 325.25
691291 100 µg 504.95

694301 **-20°C**
EPIDERMAL GROWTH FACTOR RECEPTOR 100 µg 139.90
POLYCLONAL ANTIBODY
Anti-Human
Host: sheep
Form: purified Ig fraction
Conc/Titer: 1:50-1:500
Applications: Immunoblotting
The antibody was produced by immunization with EGFr fragment. This antibody has unique binding characteristics, and it immunoprecipitates the receptor protein while leaving the mechanism of signal transduction (tyrosine phosphorylation) intact. It is effective across species for immunostaining fixed cultured cell receptors in dilution ranges that are dependent upon the receptor concentrations in the preparation.

151064 **0-5°C**
DL-**EPINEPHRINE** 1 g 10.00
[329-65-7] 5 g 16.50
(DL-Adrenaline) 25 g 52.00
Crystalline 100 g 173.00
$C_9H_{13}NO_3$ MW 183.2

151065 **0-5°C**
L-**(-)-EPINEPHRINE** 1 g 9.90
[51-43-4] 5 g 31.80
(L-Adrenaline) 10 g 57.00
Metabolite of norepinephrine
$C_9H_{13}NO_3$ MW 183.2

195166 **0-5°C**
L-**(-)-EPINEPHRINE-(+)-BITARTRATE** 1 g 9.00
[51-42-3] 5 g 28.00
Crystalline 25 g 97.00
$C_9H_{13}NO_3 \bullet C_4H_6O_6$ 100 g 267.00

CATALOG NUMBER | | | U.S. $

195984 **0-5°C**
EPIRUBICIN 1 mg 42.00
[56390-09-1]
(4′-Epidoxorubicin)
Hydrochloride
Purity: ≥95%
Anti-tumor antibiotic which is less toxic than doxorubicin.
$C_{27}H_{29}NO_{11} \bullet HCl$ MW 580.0

158813 **RT**
ERBSTATIN ANALOG 5 mg 34.00
[63177-57-1] 25 mg 124.00
(Methyl 2,5-dihydroxycinnamate)
Purity: >98%
Erbstatin is a novel inhibitor of the EGF receptor associated tyrosine kinase[1]. It is an unstable compound and is completely inactivated in serum in 30 minutes. Methyl 2,5-dihydroxycinnamate is a stable erbstatin analog retaining activity after a 60 minute incubation. It inhibits EGF receptor associated tyrosine kinase *in vitro* (IC_{50}=0.77 µM)[2]. Inhibition is competitive with substrate and noncompetitive with ATP.
Ref: 1. Imoto, M., et al., (1987), Biochem. Int., **15**, 989.
2. Umezawa, K., et al., (1990), FEBS Lett., **260**, 198.

193652 **RT**
ERGOCORNINE 5 mg 15.00
[564-36-3] 25 mg 50.00
An ergot alkaloid which acts as a dopamine agonist.
$C_{31}H_{39}N_5O_5$ MW 561.7

157942 **0-5°C**
ESCULETIN 1 g 27.00
[305-01-1] 5 g 109.00
(6,7-Dihydroxycoumarin; Esculetol)
Yellow crystals.
An inhibitor of 5-lipoxygenase and 12-lipoxygenase, but does not inhibit cyclooxygenase.
$C_9H_6O_4$ MW 178.1

153716 **0-5°C**
(-)-ESEROLINE FUMARATE 25 mg 80.00
[104015-29-4] 50 mg 144.00
$C_{13}H_{18}N_2O \bullet C_4H_4O_4$ MW 334.4

159592 **0-5°C**
ETAZOLATE 1 mg 17.20
[51022-77-6] 5 mg 56.00
Hydrochloride
Inhibitor of phosphodiesterase IV
$C_{14}H_{19}N_5O_2 \bullet HCl$ MW 325.8

190203 **RT**
ETHACRYNIC ACID 1 g 10.65
[58-54-8] 5 g 32.25
([2,3-Dichloro-4(2-methylene-butyryl)phenoxy] acetic acid) 25 g 105.10
Crystalline
$C_{13}H_{12}Cl_2O_4$ MW 303.1

157964 **0°C**
7-ETHOXYRESORUFIN 1 mg 51.30
[5725-91-7] 5 mg 222.10
(7-Ethoxy-3H-phenoxazin-3-one; Resorufin ethyl ether)
Fluorimetric substrate for detection of cytochrome P_{450} linked enzymes.
Ref.: Burke, M.D., et al., Biochem. Pharmacol., **34**, 3337 (1985).
$C_{14}H_{11}NO_3$ MW 241.2

ETHYL β-CARBOLINE-3-CARBOXYLATE
See: β-Carboline-3-carboxylic acid ethyl ester

153714 **RT**
5′-N-ETHYLCARBOXAMIDO-ADENOSINE 10 mg 46.30
[78647-50-4] 15 mg 65.10
(NECA) 25 mg 86.75
Adenosine agonist with affinity at A_1 and A_2 receptors.
$C_{12}H_{16}N_6O_4$ MW 308.3

Neuroscience

CATALOG NUMBER			U.S. $
158921 0°C	**N-ETHYLDEOXYNOJIRIMYCIN** **Purity: 99%** HIV cytopathicity inhibitor. **Ref.:** Fleet, G.W.J., et.al., FEBS Lett., **237**, 128 (1988). MW 191.2	1 mg 5 mg	103.20 412.75
159594 0-5°C	**ETHYL 3,4-DIHYDROXY-BENZYLIDENECYANOACETATE** [132464-92-7] Inhibitor of 12-lipoxygenase. $C_{12}H_{11}NO_4$ MW 233.2	10 mg 50 mg	30.00 132.00
195173 RT	**ETHYLENEDIAMINETETRAACETIC ACID** [6381-92-6] **Disodium Salt Dihydrate** **Purity: 99%** Chelating agent. Produces colorless aqueous solutions. $C_{10}H_{14}N_2O_8Na_2 \bullet 2H_2O$ MW 372.2	100 g 250 g 500 g 1 kg	22.00 44.00 58.00 88.00
193653 RT	**5-(N-ETHYL-N-ISOPROPYL)AMILORIDE** [1154-25-2] (EIPA) Inhibitor of the Na^+/H^+ antiporter. **Ref.:** Neylon, et al., J. Pharmacol. Exp. Ther., **248**, 991 (1989). $C_{11}H_{18}N_7OCl$ MW 299.8	1 mg 5 mg 10 mg	13.25 44.10 79.40
153713 RT	**R(+)-ETICLOPRIDE** (R(+)-3-Chloro-5-ethyl-N-[(1-ethyl-2-pyrrolidinyl)methyl]-6-hydroxy-2-methoxybenzamide HCl) **Hydrochloride** $C_{17}H_{25}ClN_2O_3 \bullet HCl$ MW 377.3	5 mg 10 mg 25 mg	37.00 66.00 132.00
153711 0-5°C	**S(-)-ETICLOPRIDE** [84226-12-0] (S(-)-3-Chloro-5-ethyl-N-[(1-ethyl-2-pyrrolidinyl)methyl]-6-hydroxy-2-methoxybenzamide HCl) **Hydrochloride** Selective D_2 dopamine receptor antagonist. $C_{17}H_{25}ClN_2O_3 \bullet HCl$ MW 377.3	5 mg 10 mg 25 mg	32.00 58.00 116.00

-F-

26035 0-5°C	***cis,cis*-FARNESYLPYROPHOSPHATE, [1-^{3}H]** **Triammonium salt** Sp. Act. 15-30 Ci/mmol 0.55-1.11 TBq/mmol Ethanol solution. *Please call for delivery information.* MW 433.43	50 µCi	1211.55
159920 -20°C	**FARNESYLTHIOACETIC ACID** [135784-48-4] (FTA) **Purity: 98%** A posttranslational modification reagent which specifically inhibits methyl esterification of farnesylated proteins. **Ref.:** Tan, E.W., et al., *J. Biol. Chem.*, **266**, 10719 (1991). MW 296.5	5 mg 10 mg	131.90 229.30
158922 -20-0°C	**FENVALERATE** [51630-58-1] Mixture of isomers Fenvalerate is a Type II pyrethrin and a potent inhibitor of calcineurin (protein phosphatase 2B). $C_{25}H_{22}ClNO_3$ MW 419.92	25 mg 50 mg	52.50 95.00
153701 RT	**FLUNARIZINE** [52468-60-7] (1-[*Bis*(4-fluorophenyl)methyl]-4-(3-phenyl-2-propenyl)-piperazine dihydrochloride) **Dihydrochloride** A vasodilator and calcium channel antagonist. $C_{26}H_{26}F_2N_2 \bullet 2HCl$ MW 477.4	50 mg 100 mg 250 mg	25.35 43.35 101.25
158059 0°C	**FLUO 3-AM** [121714-22-5] Fluorescent indicator for intracellular calcium. **Ref.**: Kao, J.P.Y., et al., J. Biol. Chem., **264**, 8179 (1989). MW 1129.9	0.5 mg 1 mg	150.20 281.60
158061 0-5°C	**N-(3-FLUORANTHYL)MALEIMIDE** [60354-76-9] Fluorescent protein marker **Ref.**: Kanoaka, Y., et al., Chem. Pharm. Bull., **24**, 1417 (1976) $C_{20}H_{11}NO_2$ MW 297.3	1 mg	45.00
153704 RT	**5-FLUOROINDOLE-2-CARBOXYLIC ACID** [399-76-8] Inhibitor of glycine potentiation at NMDA receptor. $C_9H_6NO_2F$ MW 179.2	100 mg 250 mg	41.95 83.90
159921 0°C	**2-FLUOROPALMITIC ACID** [16518-94-8] **Purity: 98%** Inhibitor of palmityl-CoA biosynthesis resulting in the blocking of protein palmitoylation. A posttranslational modification reagent which palmitoylates G protein α-subunits, G proteins of low molecular weight, and p56. **Ref.:** 1. Abraham, N. and Veillette, A., *Mol. Cell. Biol.*, **10**, 5197 (1990). 2. Hancock, J.F., et al., *Cell*, **57**, 1167 (1989). 3. Soltysiak, R.M., et al., *Biochim. Biophys. Acta*, **792**, 214 (1984). MW 274.4	5 mg 25 mg	74.55 315.30
159924 RT	**1-(2-*bis*-[4-FLUOROPHENYL]-METHOXYETHYL)-4-(3-PHENYL-2-PROPYL)PIPERAZINE** [67469-78-7] (GBR 12909) **Hydrochloride** **Purity: 98%** Inhibits the uptake of dopamine. **Ref.:** 1. Heikkila, R.E., et al., *Eur. J. Pharmacol.*, **103**, 241 (1984). 2. Teicher, M.H., et al., *Dev. Brain Res.*, **30**, 124 (1986). 3. Melia, K.F., et al., *J. Pharmacol. Exp. Therap.*, **258**, 626 (1991). MW 523.5	5 mg 10 mg 50 mg	36.10 59.65 269.45
153702 RT	***cis*(Z)-FLUPENTHIXOL** [2709-56-0] (4-[3-[2-Trifluoromethyl)-9H-thioxanthen-9-ylidene]propyl]-1-piperazineethanol 2HCl) **Dihydrochloride** A dopamine antagonist $C_{23}H_{25}F_3N_2OS \bullet 2HCl$ MW 507.5	50 mg 75 mg 100 mg	65.10 94.00 115.70
193655 RT	***trans*-(E)-FLUPENTHIXOL** [53772-85-3] **Dihydrochloride** A less potent dopamine antagonist than the *cis*-isomer. $C_{23}H_{25}F_3N_2OS \bullet 2HCl$ MW 507.5	10 mg 25 mg	69.00 138.00
153706 RT	**FLUPHENAZINE** [146-56-5] (4-[3-[2-(Trifluoromethyl)-10H-pheno-thiazin-10-yl]-1-piperazineethanol 2HCl) **Dihydrochloride** **Crystalline** $C_{22}H_{26}F_3N_3OS \bullet 2HCl$ MW 510.4	1 g 5 g	15.00 60.00

CATALOG NUMBER			U.S. $
158925 **RT**	**FLUPHENAZINE-N-2-CHLOROETHANE** [83016-35-7] (SK & F 7171A, HCl) **Hydrochloride** **Purity: 98%** Potent and irreversible calmodulin inactivator. It also demonstrates antiproliferative and cytotoxic activity. **Ref.:** Tanaka, T., et.al., Pharmacology, **26**, 249 (1983). MW 528.6	10 mg 25 mg	22.00 44.00
153705 **RT**	**FLUPHENAZINE N-MUSTARD** [83016-35-7] [((2-Chloroethyl)-4-[3-(2-trifluoromethyl-10-phenothiazinyl)propylpiperazine)] **Dihydrochloride** $C_{22}H_{25}ClF_3N_3S$ • 2HCl MW 528.6	25 mg 50 mg 100 mg	39.80 72.25 130.15
159115 **-20°C**	**FLUPROSTENOL** [40666-16-8] ((±)16-(m-Trifluoromethylphenoxy)-tetranor-prostaglandin $F_{2\alpha}$) **Purity: 98%** Ethanol solution MW 458.2	1 mg 5 mg	91.70 412.00
153707 **RT**	**FLUSPIRILENE** [1841-19-6] (R6218; 8-[4,4-*Bis*(p-fluorophenyl)butyl]-1-phenyl-1,3,8-triazino[4,5]decan-4-one) A dopamine antagonist $C_{29}H_{31}F_2N_3O$ MW 475.6	10 mg 25 mg 50 mg	108.45 216.95 361.50
190669 **0°C**	**FORSKOLIN** [66575-29-9] From *Coleus forskohlii* (7β-acetoxy-8,13-epoxy-1α,6β,9α-trihydroxy-labd-14-ene-11-one) Reported to demonstrate positive inotropic and heart rate-increasing activity at low doses in animals. Also functions as an antihypertensive and vasodilator at higher doses. Activates adenylcyclase in rat liver membranes. **Ref.:** H. Metzger and E. Lindner, I.R.C.S. Med. Sci., Biochem., Cardiovascular System Pharm., **9**, 99 (1981). $C_{22}H_{34}O_7$ MW 410.5	1 mg 5 mg 10 mg 25 mg 50 mg	22.20 50.80 98.00 217.85 407.05
159596 **0°C**	**FORSKOLIN, 7β-DEACETYL-7β-(γ-N-METHYLPIPERAZINO)-BUTYRYL** **Dihydrochloride** Powerful activator of adenylate cyclase. Water soluble derivative of forskolin. MW 627.0	1 mg 5 mg	68.75 275.00
159597 **0°C**	**FORSKOLIN, 1,9-DIDEOXY** [64657-18-7] Natural derivative of forskolin, but inactive. May be used as negative control. $C_{22}H_{34}O_5$ MW 378.5	1 mg 5 mg	73.35 293.50
151174 **0°C**	**FORSKOLIN, 7-O-HEMISUCCINYL-7-DEACETYL** [83797-56-2] Soluble forskolin derivative useful for preparation of probes. **Ref.:** (1) T.P. Feuffer and H. Metzger, Febs Letters, **146**, 369 (1982); (2) N.J. Souza, A.N. Dohadwalla and J. Reden, Med. Res. Reviews, **3**, 201 (1983). $C_{24}H_{36}O_9$ MW 468.6	1 mg	137.60
159925 **-20°C**	**FUMONISIN B_1** [116355-83-0] From *Fusarium moniliforme* **Purity: 98%** Sphingosine N-acyltransferase (ceramide synthase) inhibitor which leads to blocking sphingolipid biosynthesis. $C_{34}H_{59}NO_{15}$ MW 721.8	1 mg 5 mg	94.60 429.95
198781 **-20-0°C**	**FUMONISIN B_2** [116355-84-1] From *Fusarium moniliforme* White powder. Fungal metabolite Inhibits sphingolipid biosynthesis. **Ref:** E.Wang et al., J.Biol.Chem. **266** 1486 (1991). $C_{34}H_{59}NO_{15}$ MW 705.8	1 mg 5 mg	175.00 595.00
153708 **0-5°C**	**β-FUNALTREXAMINE** [72786-10-8] (βFNA; [E]-4-[[(5α,6β)-17-(cyclopropylmethyl)-4,5-epoxy-3,14-dihydroxy-morphinan-6-yllamino]-4-oxo-2- butenoic acid methyl ester HCl) **Hydrochloride** $C_{25}H_{30}N_2O_6$ • HCl MW 490.9	1 mg 5 mg 10 mg	163.40 719.25 1155.00
152285 **0°C**	**FURA 2** [96314-98-6] [1-(2-[5-Carboxyoxazol-2-yl]-6-aminobenzofuran-5-oxy)-2-(2′-amino-5′-methylphenoxy)ethane-N,N,N′,N′-tetraacetic acid] Calcium-specific chelator indicator. Calcium concentration may be measured directly using the ratio of fluorescence at 510 nm produced by excitation at 340 nm and 380 nm. $C_{29}H_{27}N_3O_{14}$ MW 641.6	1 mg	95.00
152286 **RT**	**FURA 2-AM** [108964-32-5] This is the acetoxymethyl ester of FURA 2. Able to permeate cell membranes and load FURA 2 into cells. Inside cells, FURA 2-AM is rapidly hydrolyzed by cytoplasmic esterases. $C_{44}H_{47}N_3O_{24}$ MW 1001.9	0.5 mg 1 mg	74.00 123.00
158208 **0°C**	**FUREGRELATE** [85666-17-7] (5-[3-Pyridinylmethyl]benzofurancarboxylic acid) **Sodium Salt** Inhibitor of thromboxane synthetase. $C_{15}H_{10}NO_3Na$ MW 275.2	10 mg 50 mg 100 mg	16.50 64.40 115.80

-G-

	GABACULINE *See*: (±)-3-Amino-2,3-dihydrobenzoic acid		
159782 **RT**	**GALANTHAMINE** [357-70-0] Cholinesterase inhibitor **Hydrobromide** **Ref.:** Chopin and Bailey, Psychopharm., **106**, 26 (1992). $C_{17}H_{21}NO_3$•HBr MW 368.3	5 mg 25 mg 100 mg	16.00 48.00 175.00
158794 **RT**	**GALLAMINE TRIETHIODIDE** [65-29-2] **Purity: > 95%** An M_2 muscarinic antagonist with pronounced cardioselectivity. Acts via allosteric modulation of receptor binding. **Ref:** 1. Hammer, R., et al., (1986), Life Sci., **38,** 1653. 2. Nedoma, J., et al., (1986), J. Pharmacol. Exp. Ther., **236,** 219. 3. Michel, A.D., et al., (1990), Eur. J. Pharmacol., **182,** 335. 4. Kenakin, T., et al., (1989), J. Pharmacol. Exp. Ther., **250,** 944. $C_{30}H_{60}N_2O_3I_3$ MW 891.5	1 g 5 g	34.50 155.25
159816 **0-5°C**	**GEA 3162** [144575-47-3] (5-Amino-3-(3,4-dichlorophenyl)-1,2,3,4-oxatriazolium chloride) Nitric Oxide (NO) donor. $C_7H_4N_4OCl_2$ • HCl MW 267.6	1 mg 5 mg 25 mg	13.75 51.60 206.35

CATALOG NUMBER			U.S. $
159817 0-5°C	**GEA 5024** [144575-27-9] (5-Amino-3-(3-chloro-2-methylphenyl)-1,2,3,4-Oxatriazolium chloride) A water soluble, stable nitric oxide (NO) donor. $C_8H_7N_4OCl \bullet HCl$ MW 247.1	1 mg 5 mg 25 mg	13.75 51.60 206.35
195994 -20°C	**GELDANAMYCIN** [30562-34-6] From *Streptomyces hygroscopius* **Purity: ≥95%** Benzoquinoid antibiotic which is a potent inhibitor of pp60^{src} tyrosine kinase and c-*myc* gene expression in murine lymphoblastoma cells. $C_{29}H_{40}N_2O_9$ MW 560.6	100 µg	215.25
152355 0°C	**GENISTEIN** [446-72-0] (4,5,7-Trihydroxyiso-flavone) Highly specific inhibitor of tyrosine protein kinases. Also inhibits EGF-stimulated phosphorylation in cultured cells. Genistein is an isoflavone compound isolated from the fermentation broth of *Pseudomonas* sp. $C_{15}H_{10}O_5$ MW 270.2	10 mg 50 mg	48.10 215.00
198770 0°C	**GERANYLGERANIOL** [24034-73-9] Clear, colorless liquid. Useful for studying mammalian cell protein isoprenylation. May affect regulation of cell cycle progress. **Ref:** Crick, et al. Biochemical and Biophysical Research Commun. **237**, 483 MW 290.5	25 mg 100 mg	10.00 28.00
194792 -20°C	***trans*-GERANYLGERANYL[1-d]-PYROPHOSPHATE** (3,7,11,15-Tetramethyl-2,6-10,14-hexadecatraenyl pyrophosphate) **Deuterated** **Triammonium Salt** MW 501.5	1 mg	975.00
198736 -20°C	**GERANYLGERANYLPYRO-PHOSPHATE** [6699-20-3] (3,7,11,15-Tetramethyl-2,6-10,14-hexadecatraenyl pyrophosphate•NH_3 **Triammonium Salt** **Purity: 95%** A posttranslational modification reagent which is a geranylgeranyl-donor molecule used for isoprenylation of proteins accompanied by geranylgeranyltransferase. **Ref.:** Seabra, M., et al., *J. Biol. Chem.*, **267**, 14497 (1992). $C_{20}H_{36}O_7P_2 \bullet 3\ NH_3$ MW 555.1	200 µg 1 mg	91.85 183.75
26046 0-5°C	***trans*-GERANYLGERANYL-PYROPHOSPHATE, [1-^{3}H]** **Triammonium salt** Sp. Act. 15-30 Ci/mmol 0.55-1.11 TBq/mmol Ethanol solution **Ref.:** Seabra, M., et al., Science, **259**, 377 (1993). *Please call for delivery information.* MW 501.3	50 µCi 250 µCi 1 mCi	277.70 653.65 1514.75
26046H 0-5°C	***trans*-GERANYLGERANYL-PYROPHOSPHATE, [1-^{3}H]** **Triammonium salt** Sp. Act. 50-60 Ci/mmol 1.85-2.22 TBq/mmol Ethanol solution **Ref.:** Seabra, M., et al., Science, **259**, 377 (1993). *Please call for delivery information.* MW 501.3	50 µCi 250 µCi 1 mCi	277.70 653.65 1514.75
26037 0-5°C	***trans,trans,cis*-GERANYLGERANYL-PYROPHOSPHATE, [1-^{3}H]** **Triammonium salt** Sp. Act. 15-30 Ci/mmol 1.85-2.22 TBq/mmol Ethanol solution. *Please call for delivery information.* MW 501.3	250 µCi	787.10
159928 -20°C	**GINKGOLIDE B** [15291-77-7] (BN 52021) **From Ginkgo Leaves** **Purity: 90%** Most potent PAF antagonist of the ginkgolide family. Inhibits both platelet aggregation and PMNL chemotaxis induced by PAF. **Ref.:** 1. Nunez, D., et al., *Eur. J. Pharmacol.*, **123**, 197 (1986). 2. Tamura, N., et al., *Biochem. Biophys. Res. Commun.*, **142**, 638 (1987). $C_{20}H_{24}O_{10}$ MW 424.4	1 mg 5 mg 10 mg 25 mg	11.20 38.45 59.65 120.40
195777 -20°C	**GLIAL DERIVED NEUROTROPHIC FACTOR** (GDNF) **Rat, Recombinant** S*f* 21 Expressed **Purity: ≥97%** **Activity:** ED_{50} = 1-3 ng/ml.	10 µg	572.00
691821 -20°C	**GLIAL FIBRILLARY ACIDIC PROTEIN** *MONOCLONAL ANTIBODY* (GFAP) **Anti-Human** **Clone:** 8 **Isotype:** mouse IgG_1 presented as tissue culture supernatant **Conc/Titer:** 1:5-1:10 **Applications:** ELISA; Immunoblotting The original immunogen was from human spinal cord. The antibody recognizes the 56Kd GFAP protein in immunoblots and ELISA. It can be used to discriminate glial tumors, including astrocytomas and ependymomas from other tumors, such as meningiomas, neuroblastomas, chordomas, chondrosarcomas, lymphomas, and carcinomas. It is reactive on both frozen and paraffin sections.	1 ml	211.00
691102 -20°C	**GLIAL FIBRILLARY ACIDIC PROTEIN** *MONOCLONAL ANTIBODY* (GFAP) **Anti-Porcine** **Clone:** G-A-5 **Isotype:** mouse IgG_1 **Conc/Titer:** 1:300 **Applications:** PAP; Tissue sections The original immunogen was produced by the fusion of mouse myeloma cells and mouse spleen cells immunized with purified porcine GFAP. By use of well defined GFAP fragments, the antibody was shown to react with the carboxyterminal Cys II fragment. It appears to be broadly cross-reactive among species. Immunoblots on extracts of the glioma cell line U333 CG/U343MG specifically visualize a single 51 kDa band.	1 ml	179.45

CATALOG NUMBER			U.S. $
157236 **0-5°C**	**GLIBENCLAMIDE** [10238-21-8] (Glyburide; glybenclamide; N-p-[2-(5-Chloro-2-methoxybenzamido)-ethyl]benzene-sulfonyl-N′-cyclohexylurea) **Purity: 98%** Selectively blocks ATP-sensitive K^+ channels and vascular smooth muscle relaxation. **Ref.:** 1. Schmid-Adomarchi, et.al., J. Biol. Chem., **262**, 15840 (1987). 2. Winquist, R.J., et.al., J. Pharmacol. Exp. Ther., **248**, 149 (1989). 3. Fosset, M., et.al., J. Biol. Chem., **263**, 7933 (1988). 4. Miller, J.A., et.al., J. Pharmacol. Exp. Ther., **256**, 358 (1991). 5. Cook, D.L. and Hales, C.N., Nature, **311**, 271 (1984). $C_{23}H_{28}ClN_3O_5S$ MW 494	5 g 10 g	34.00 61.00
159797 **RT**	**GLIPIZIDE** [29094-61-9] An ATP-dependent potassium channel blocker. $C_{21}H_{27}N_5O_4S$ MW 445.5	25 mg 100 mg 500 mg	13.75 32.05 100.85
153102 **-20-0°C**	**PyroGLU-GLY-ARG-PHE AMIDE** [107535-01-3] A neuropeptide originally isolated from the pennatulid *Renilla koellikeri* and the sea anemone *Anthopleura elegantissima*. **Ref:** 1. Grimmelikhuijzen, C.J.P. and Graff, D., Proc. Natl. Acad. Sci. (USA), **83**, 9817 (1986). 2. Grimmelikhuijzen, C.J.P. and Gregor, A., FEBS Lett., **211**, 105 (1987).	25 mg	125.00
153103 **-20-0°C**	**PyroGLU-SER-LEU-ARG-TRP AMIDE** [114056-25-6] A neuropeptide originally isolated from sea anemones. **Ref:** Graff, D. and Grimmelikhuijzen, C.J.P., Brain Res., **422**, 354 (1988).	1 mg 5 mg 25 mg	20.00 74.50 298.00
101793 **RT**	**L-GLUTAMIC ACID** [56-86-0] (L-2-Aminopentanedioic acid) **Free Acid** **Purity: 99-100%** **Crystalline** $C_5H_9NO_4$ MW 147.1	100 g 500 g 1 kg 5 kg	9.00 16.00 27.00 112.00
194676 **RT**	**L-GLUTAMIC ACID** [56-86-0] (L-2-Aminopentanedioic acid) **Free Acid** **Cell Culture Reagent** **Purity: 99-100%** **Crystalline** $C_5H_9NO_4$ MW 147.1	500 g 1 kg 5 kg	18.50 30.00 125.00
157220 **0°C**	**γ-D-GLUTAMYLAMINOMETHYL-SULFONIC ACID** [90237-02-8] Kainate/quisqualate selective antagonist **Ref.**: Davies, J., et al., Comp. Biochem. Physiol., **72**, 211 (1982). $C_6H_{12}N_2O_6S$ MW 240.2	1 mg 5 mg 10 mg	16.40 64.20 115.60
151193 **0-5°C**	**GLUTATHIONE OXIDIZED** [121-24-4] **Anhydrous** $(\gamma\text{-L-Glutamyl-L-cysteinylglycine})_2$ Acts as hydrogen acceptor in enzymic determination of NADP and NADPH. $C_{20}H_{32}N_6O_{12}S_2$ MW 612.6	250 mg 500 mg 1 g 5 g	18.05 28.90 45.30 206.35
101814 **0-5°C**	**GLUTATHIONE REDUCED** [70-18-8] (γ-L-Glutamyl-L-cysteinylglycine) **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	1 g 5 g 10 g 25 g 50 g 100 g	12.40 25.15 35.55 70.00 133.60 239.00
194679 **0-5°C**	**GLUTATHIONE REDUCED** [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	5 g 10 g 25 g 100 g	32.25 46.30 97.00 315.00
100689 **0-5°C**	**GLUTATHIONE REDUCTASE** [9001-48-3] **From Baker's Yeast** E.C.1.6.4.2. Highly purified Crystalline suspension in 3.2M ammonium sulfate, pH 6.0. **Unit Definition:** 1 unit oxidizes 1 μmole of glutathione/min. at 25°C, pH 5.5. **Activity:** Approx. 120 units/mg. **Contaminants:** Essentially free of NADPH-Oxidase, 6-PGDH.	1 mg	50.60
153104 **-20-0°C**	**PyroGLU-VAL-ASN-PHE-SER-PRO-GLY-TRP-GLY-THR-NH_2** [106018-36-4] (Hypertrehalosaemic Neuropeptide) A neuropeptide from the cockroach (*Nauphoeta cinerea*) with an amino acid sequence similar to that of Adipokinetic Hormone I. **Ref:** Gaede, G. and Rinehart, K.L., Biochem. Biophys. Res. Commun., **141**, 774 (1986). MW 1074.2	1 mg 5 mg	115.70 462.80
	GLYBURIDE *See*: Glibenclamide		
195999 **-20°C**	**GLYCOGEN SYNTHASE** [9014-56-6] (UDO Glucose:glycogen 4-α-glucosyltransferase) EC 2.4.1.11 **From Rabbit Muscle** Suspension in 60% glycerol with buffers. **Activity:** ~2-7 units/mg protein **Unit Definition:** one unit will catalyze the incorporation of 1 μmol of glucose from UDP-glucose into glycogen per minute at pH 8.2, 30°C.	1 U 5 U	72.50 290.00
195210 **0-5°C**	**GOSSYPOL** [303-45-7] Potential use as male contraceptive by apparently inhibiting LH. **Ref.:** Poso, H., et al., Lancet, **1**, 885 (1980). $C_{30}H_{30}O_8$ MW 518.6	25 mg 100 mg 250 mg	22.15 62.50 125.25
195211 **0°C**	**GOSSYPOL-ACETIC ACID** [12542-36-8] Crystalline complex Inhibits the autolytic conversion of pepsinogen to pepsin. **Ref.:** (1) Tanksley, T.D., Jr., et al., J. Biol. Chem., **245**, 6456 (1970); (2) Wong, R.C., et al., J. Biol. Chem., **247**, 1625 (1972). $C_{30}H_{30}O_8 \bullet C_2H_4O_2$	25 mg 100 mg 250 mg	13.00 35.00 67.00
196000 **-20°C**	**GRANZYME B INHIBITOR** (Z-Ala-Ala-Asp-CH_2Cl; Z-AAD-CMK) **Purity: ≥95%** Inhibits granzyme B present in cytoplasmic granules of cytotoxic T-lymphocytes and NK cells. $C_{19}H_{24}N_3O_7Cl$ MW 441.9	1 mg	105.00
159798 **0-5°C**	**GRIESS REAGENT** Reagent for determination of nitrite (NO^-) in biological media. Consists of 0.1% naphthylethylenediamine HCl in distilled H_2O and 1% sulfanilamide in 5% H_3PO_4 (1:1 mixture)	5 ml 25 ml	19.55 77.95

CATALOG NUMBER			U.S. $
694201 **-20°C**	**GTPase ACTIVATING PROTEIN** *MONOCLONAL ANTIBODY* (GAP, Anti) **Clone:** GAP13 **Isotype:** IgG_1 **Conc/Titer:** 1:1,000 Applications: Immunoblotting Tyrosine phosphorylation of GAP, an activating protein for the GTPase activity of *ras*, is stimulated by several tyrosine kinases, including EGF, PDGF, CSF-1 and several oncogene products. The amino acid sequence of this peptide is as follows: NH_2-Thr-Pro-Gly-Asp-Tyr-Ser-Leu-Tyr-Phe-Arg-COOH. The antibody is packaged at a concentration of 1 mg/ml in 40% glycerol, 20mM sodium phosphate, pH 7.5, 150mM NaCl, 3mM sodium azide. A dilution of 1:1000 is suggested for Western Blot and other immunochemical techniques. **Ref.:** 1. Molloy, C.J., et al., *Nature*, **342**, 711-714 (1989). 2. Kaplan, et al., *Cell*, **61**, 125-133 (1990). 3. Reedijk, M., *Mol. Cell. Biol.*, **10**, 5601-5608 (1990).	100 µg	651.00
193657 **RT**	**GUANABENZ ACETATE** [23256-50-0] ([2,6-Dichlorobenzylidene)-amino]guanidine) An α_2-adrenergic agonist. $C_8H_8N_4Cl_2 \bullet C_2H_4O_2$ MW 291.1	25 mg 100 mg	20.95 74.95
158926 **0°C**	**N-(2-GUANIDINOETHYL)-5-ISOQUINOLINESULFONAMIDE** [91742-10-8] (HA-1004) **Hydrochloride** **Purity: 98%** Inhibitor of PKA and PKG specifically over PKC and MLCK. Combined with H7 as a probe for PKC-specific effects. **Ref.:** 1. Hidaka, H., et.al., Biochemistry, **23**, 5036 (1984). 2. Spangler, R., et.al., Proc. Natl. Acad. Sci. USA, **86**, 7017 (1989). $C_{12}H_{15}N_5O_2S \bullet HCl$ MW 329.8	5 mg 10 mg	180.00 299.00
101433 **0°C**	**GUANOSINE-3′,5′-*cyclic*-MONOPHOSPHORIC ACID** [40732-48-7] (3′,5′-Cyclic GMP) **Sodium Salt** **Purity: ~95%** $C_{10}H_{11}N_5O_7PNa$ MW 367.2	25 mg 100 mg 250 mg 500 mg 1 g	13.45 41.35 84.75 127.55 211.75
100702 **0°C**	**GUANOSINE-5′-MONOPHOSPHATE** [5550-12-9] **Disodium Salt** White crystalline powder **Purity: 98-100%** We believe this is the best GMP available anywhere. Many dealers offer off-white powders with small amounts of contaminants and residual salt. Our material shows only one spot by both TLC and electrophoresis and is also evaluated by UV absorption. $C_{10}H_{12}N_5O_8PNa_2$ MW 407.2	500 mg 1 g 5 g 25 g 100 g	6.35 8.25 26.10 104.10 369.00

CATALOG NUMBER			U.S. $
159033 **-20°C**	**GUANOSINE-5′-O-(2-THIODIPHOSPHATE)** [97952-36-8] (GDP-β-S) **Trilithium salt** **Purity: >85%** A GDP analog which is a complete inhibitor of protein G activation by GTP and GTP analogs. **Ref.:** 1. Burch, R.M. and Axelrod, J., et.al., Proc. Natl. Acad. Sci. USA, **84**, 6374 (1987). 2. Silk, S.T., et.al., J. Biol. Chem., **264**, 21466 (1987). 3. Gilman, A.G., Annu. Rev. Biochem., **56**, 615 (1987). $C_{10}H_{12}N_5O_{10}P_2SLi_3$ MW 477.1	1 mg 5 mg	17.20 74.55
159032 **-20°C**	**GUANOSINE-5′-O-(3-THIOTRIPHOSPHATE)** [94825-44-2] (GTPγS) **Tetralithium salt** **Purity: >85%** A GTP analog which activates protein G. **Ref.:** 1. Silk, S.T., et.al., J. Biol. Chem., **264**, 21466 (1989). 2. Gilman, A.G., Annu. Rev. Biochem., **56**, 615 (1987). $C_{10}H_{12}N_5O_{13}P_3SLi_4$ MW 563	1 mg 5 mg 10 mg	56.15 258.00 484.75
195213 **0°C**	**GUANOSINE-5'-TRIPHOSPHATE** [56001-37-7] (GTP) **Disodium Salt** **Purity: 95-98%** Enzymatically prepared by phosphorylation of 5′-GMP. $C_{10}H_{14}N_5O_{14}P_3Na_2$ MW 567.2	10 mg 25 mg 100 mg 250 mg 500 mg 1 g	12.50 20.00 60.00 102.00 170.00 245.00
151204 **0°C**	**5′-GUANYLYL-IMIDODIPHOSPHATE** [64564-03-0] (GMP-PNP; Guanosine 5′-[β,γ-imido]triphosphate tetralithium salt) **Tetralithium Salt** $C_{10}H_{13}Li_4N_6O_{13}P_3$ MW 545.9	5 mg 10 mg 25 mg	65.50 120.55 277.20
151219 **0-5°C**	**GUVACINE** [498-96-4] (1,2,5,6-Tetrahydronicotinic acid) **Hydrochloride** GABA uptake inhibitor $C_6H_9NO_2 \bullet HCl$ MW 163.5	100 mg	246.75

-H-

H-7

See: 1-(5-Isoquinolinesulfonyl)-2-methylpiperazine

H-8

See: N-[2-(Methylamino)ethyl]-5-isoquinolinesulfonamide

H-9

See: n-(2-Aminoethyl)-5-isoquinolinesulfonamide

H-89

See: N-[2-(p-Bromocinnamylamino)ethyl]-5-isoquinolinesulfonamide

HA-1004

See: N-(2-Guanidinoethyl)-5-isoquinolinesulfonamide

HA-1077

See: 1-(5-Isoquinolinesulfonyl)homopiperazine

HA-156

See: 1-(8-Chloro-5-isoquinolinesulfonyl)piperazine

CATALOG NUMBER			U.S. $
159932 -20°C	**HALOENOL LACTONE SUICIDE SUBSTRATE** [88070-98-8] (HELSS; E-6-(Bromomethylene)tetrahydro-3-(1-naphthalenyl)-2H-pyran-2-one). **Purity: 98%** Irreversibly and potently inhibits calcium-independent phospholipase A_2 (70% at 100 nm) 100 fold greater than calcium-dependent PLA_2. **Ref.:** 1. Hazen, S.L., et al., *J. Biol. Chem.*, **266**, 7227 (1991). 2. Lehman, J.J., et al., *J. Biol. Chem.*, **268**, 20713 (1993).	1 mg 5 mg	45.90 189.20
153696 RT	**HALOPERIDOL** [52-86-8] (4-[4-(4-Chlorophenyl)-4-hydroxy-1-piperidinyl]-1-(4-fluorophenyl)-1-butanone) Dopamine antagonist $C_{21}H_{23}ClFNO_2$ MW 375.9	500 mg 1 g 5 g	12.00 17.00 35.00
153692 RT	**HALOPERIDOL** [59995-68-5] (4-[4-(4-Chlorophenyl)-4-hydroxy-1-piperidinyl]-1-(4-chlorophenyl)-1-butanone) **Chlorinated Analog** $C_{21}H_{23}NO_2Cl_2$ MW 392.3	5 mg 10 mg 25 mg	33.00 59.00 118.00
153695 RT	**HALOPERIDOL METABOLITE I** [39512-49-7] (4-(4-Chlorophenyl)-4-hydroxy-piperidine) $C_{11}H_{14}ClNO$ MW 211.7	10 mg 15 mg 25 mg	21.75 28.85 43.35
153694 RT	**HALOPERIDOL METABOLITE II** [34104-67-1] **Reduced Haloperidol** ((±)-4-(4-Chlorophenyl)-α-(4-fluorophenyl)-4-hydroxy-1-piperidinebutanol) $C_{21}H_{25}ClFNO_2$ MW 377.9	15 mg 25 mg 50 mg	86.00 120.40 206.35
153693 RT	**HALOPERIDOL METABOLITE III** [366-77-8] (3-(4-Fluorobenzoyl)propionic acid) $C_{10}H_9FO_3$ MW 196.2	10 mg 15 mg 25 mg	21.75 28.85 43.35
158814 -20°C	**HDBA** (2-Hydroxy-5-(2,5-dihydroxy-benzylamino)benzoic acid) **Purity: > 98%** Inhibits Ca^{2+}/calmodulin kinase II (IC_{50}=0.2 μM)[1]. Also inhibits EGF receptor tyrosine kinase (IC_{50}=0.044 μM)[2] and $pp60^{c\text{-}src(+)}$ kinase (IC_{50} = 0.5 μM)[1]. MW 275.3 **Ref:** 1. O'Dell, T.J., et al., (1991), Nature, **353**, 558. 2. Takahashi, I., et al., (1989), Biochem. Biophys. Res. Comm., **165**, 1207.	2 mg 10 mg	90.85 364.35
193658 -20°C	**HEAT** [30007-39-7] (2-[[β-(4-Hydroxyphenyl)-ethyl]aminomethyl}-1-tetralone) **Hydrochloride** A selective α_1-adrenoceptor agonist. $C_{19}H_{21}NO_2 \bullet HCl$ MW 331.8	5 mg 10 mg	49.60 90.40
151231 0°C	**HEMICHOLINIUM-3** [312-45-8] (2,2′-[4,4′-Biphenylene]-bis-[2-hydroxy-4,4-dimethylmorpholinium bromide]) **Purity: ~95%** $C_{24}H_{34}Br_2N_2O_4$ MW 574.4	25 mg 100 mg 250 mg	10.00 20.00 47.60
158927 RT	**N-HEPTYL-5-CHLORONAPHTHALENE-1-SULFONAMIDE** [102649-79-6] (SC-10) **Purity: 99%** Protein Kinase C activator. **Ref.:** Ito, M., et.al., Biochemistry, **25**, 4179 (1986). $C_{17}H_{22}ClNO_2S$ MW 339.9	1 mg 5 mg	70.00 248.00
158928 -20-0°C	**HERBIMYCIN A** [70563-58-5] From *Streptomyces hygroscopicus* Irreversibly inhibits tyrosine kinsases. Also, inhibits thrombin-stimulated tyrosine phosphorylation of phospholipase C. Antibiotic against Src, Yes, Fps, Ros, and, Erb oncongene reagents. **Ref.:** 1. Uehara, Y. and Fukazawa, H., Methods Enzymol., **201**, 370 (1991). 2. Fukazawa, H., et.al., Biochem. Pharmacol., **42**, 1661 (1991). 3. Satoh, T., et.al., J. Biol. Chem., **267**, 2537 (1992). 4. Weiss, R. and Nuccitelli,R., J. Biol. Chem., **267**, 5608 (1992).	100 μg	122.00
159118 -20°C	**1-O-HEXADECYL-2-O-ACETYL-sn-GLYCEROL** [77133-35-8] **Purity: 98%** Protein kinase C inactivator. Also acts as a platelet activating factor precursor. **Ref.:** 1. Daniel, L.W., et.al., ibid., **151**, 291 (1988). 2. McNamara, M.J.C., et.al., ibid., **122**, 824 (1984). 3. Lee, T.C., et.al., J. Biol. Chem., **265**, 9181 (1990). $C_{21}H_{42}O_4$ MW 358.6	5 mg 10 mg 25 mg	74.55 131.90 315.30
159119 -20°C	**1-O-HEXADECYL-2-O-ACETYL-sn-GLYCERO-3-PHOSPHO-(N,N,N-TRIMETHYL)HEXANOLAMINE** [99103-16-9] **Purity: 98%** Blocks platelet aggregation, secretion, and the production of IP_3 induced by platelet activating factor (PAF). PAF antagonist. **Ref.:** 1. Tokumura, A., et.al., J. Biol. Chem., **260**, 12710 (1985). 2. Rouis, M., et.al., Biochem. Biophys. Res. Commun., **20**, (suppl. II), 20 (1988). 3. Buxton, D.B., et.al., Biochem. Pharmacol., **35**, 893 (1986). $C_{30}H_{62}NO_7P$ MW 579.8	1 mg 5 mg	66.45 298.10
159121 -20°C	**1-O-HEXADECYL-2-O-DOCOSA-HEXAENOYL-sn-GLYCERO-3-PHOSPHORYLCHOLINE** **Purity: 98%** PAF precursor in the lipid remodeling pathway. **Ref.:** Lee, T.C., et.al., J. Biol. Chem., **265**, 4181 (1990). MW 792.2	5 mg 10 mg	183.45 338.25
101936 RT	**HEXAMETHONIUM CHLORIDE** [60-26-4] (Hexane-1,6-bis[trimethylammonium chloride]) **Purity: ~99%** $C_{12}H_{30}Cl_2N_2$ MW 273.3	5 g 25 g 100 g	8.50 33.00 115.00
26038 0-5°C	**N-HEXANOYL-D-*erythro*-DIHYDROSPHINGOSINE, [4,5-^{3}H]** Sp. Act. 30-60 Ci/mmol 1.11-2.22 TBq/mmol Ethanol solution. *Please call for delivery information.* MW 399.5	50 μCi	726.45

Neuroscience

CATALOG NUMBER			U.S. $
16020 **0-5°C**	**N-HEXANOYL-D-*erythro*-DIHYDROSPHINGOSINE, [Hexanoyl-1-^{14}C]** Sp. Act. 25-50 mCi/mmol 0.925-1.85 GBq/mmol Ethanol solution. *Please call for delivery information.* MW 399.5	50 µCi	726.45
158931 **-20-0°C**	**N-HEXANOYL-D-SPHINGOSINE** [124753-97-5] (C_6 Ceramide; N-Caproyl-D-sphingosine; Caproyl ceramide) **Purity: 98%** Stimulates cytosolic serine/threonine protein phosphatase in T9 cells and induces the phosphorylation on Thr-669 in A-431 cells. **Ref.:** 1. Dobrowsky, R.T. and Hannun, Y.A., et.al., J. Biol. Chem., **267**, 5048 (1992). 2. Mathias, S., et.al., Proc. Natl. Acad. Sci. USA, **88**, 10009 (1991).	1 mg 5 mg	13.00 58.85
190212 **0°C**	**HISTAMINE** [51-45-6] (2-[4-Imidazolyl]ethylamine) **Free Base** **Crystalline** Packaged in sealed ampule $C_5H_9N_3$ MW 111.1	1 g 5 g	26.20 111.55
100340 **RT**	**HISTAMINE** [56-92-8] (2-[4-Imidazolyl]-ethylamine 2HCl) **Dihydrochloride** **Crystalline** **Purity: 98%** $C_5H_9N_3$ • 2HCl MW 184.1	5 g 10 g 25 g	13.75 20.65 44.65
100343 **0°C**	**HISTAMINE DIPHOSPHATE** [51-74-1] **Crystalline** $C_5H_9N_3$ • $2H_3PO_4$ MW 307.2	1 g 5 g 25 g	7.50 24.45 92.00
193590 **0-5°C**	**HISTAMINE ELISA KIT** This Histamine ELISA kit provides materials for the quantitative measurement of acylated histamine in plasma, urine, and cell culture supernatants. The assay procedure follows the basic principle of competitive ELISA whereby there is competition between biotinylated and non-biotinylated antigen for a fixed number of antibody binding sites. The kit is a 12 x 8 well format. *FOR RESEARCH USE ONLY!*	1 each	735.00
193591 **0-5°C**	**HISTAMINE RELEASE ASSAY KIT** This assay measures the release of histamine which occurs upon stimulation of basophilic granulocytes depending upon their sensitivity to an allergen. Heparinized whole blood samples are incubated with different concentrations of the suspected allergen. The released histamine in the supernatant is subsequently determined using a specific plasma immunoassay, such as the Histamine ELISA Kit (Cat. No. 193590) from ICN. The kit contains sufficient materials for 96 assays when used in connection with the Histamine ELISA kit. *FOR RESEARCH USE ONLY!*	1 each	44.10
101948 **RT**	**L-HISTIDINOL** [1596-64-1] **Dihydrochloride** **Crystalline** Powerful, reversible inhibitor of protein synthesis. A normal precursor of procaryotes and eucaryotes. **Ref.:** J. Bio. Chem., **26**, 3854 (1972). $C_6H_{11}N_3O$ • 2HCl MW 214.1	100 mg 250 mg 500 mg 1 g 5 g	20.50 38.90 65.20 111.30 445.25

CATALOG NUMBER			U.S. $
159599 **0°C**	**HISTONE H1 PHOSPHORYLATION SITE** Arg-Arg-Lys-Ala-Ser-Gly-Pro-OH Substrate for protein kinase C. The phosphorylation site corresponds to Ser^{38} in calf thymus histone H1. MW 770.9	1 mg	68.75
157386 **0-5°C**	**HOMOHARRINGTONINE** [26833-87-4] Alkaloid from Cephalotaxus hainanensis. Reported to possess anti-leukemic activity. **Ref.**: Mikolajczak, K.L. and Smith, C.R., J. Org. Chem., **43**, 1762 (1978). $C_{29}H_{39}NO_9$ MW 545.6	1 mg 5 mg 10 mg	30.00 119.00 189.00
	5-HTQ *See*: Trimethylserotonin iodide		
158796 **0°C**	**(±)-HUPERZINE A** [102518-79-6] A potent acetylcholinesterase inhibitor. Nootropic agent. Improves memory and learning in animal models. **Purity: > 98%** **Ref:** Tang, X.C., et al., (1986), Acta Pharm. Sin., **7**, 507. 2. Zhang, S.-L., (1986), New Drugs Clin. Remedies,**5**, 260. $C_{15}H_{18}N_2O$ MW 242.3	1 mg 5 mg	65.00 294.00
151278 **RT**	**HYDRALAZINE** [304-20-1] (1-Hydrazinophthalazine; Apresoline) **Hydrochloride** **Crystalline** Monoamine Oxidase inhibitor $C_8H_8N_4$ • HCl MW 196.6	5 g 10 g 50 g	20.00 32.50 108.00
157403 **RT**	**HYDROCHLOROTHIAZIDE** [58-93-5] (6-Chloro-7-sulfamyl-3,4-dihydro-1,2,4-benzo thiadiazine 1,1-dioxide) **Crystalline** A carbonic anhydrase inhibitor $C_7H_8ClN_3O_4S_2$ MW 297.7	5 g 25 g 100 g	12.90 40.65 110.50
193661 **0-5°C**	**N^G-HYDROXY-L-ARGININE** [53054-07-2] **Acetate Salt** Intermediate in the conversion of L-arginine into nitric oxide (NO) and citrulline. $C_6H_{14}N_4O_3$ • $C_2H_4O_2$ MW 250.2	5 mg 10 mg	70.00 130.00
193663 **RT**	**L-(-)-*threo*-β-HYDROXYASPARTIC ACID** [7298-99-9] Neurotoxic inhibitor of L-glutamic acid and L-aspartic acid uptake. $C_4H_7NO_5$ MW 149.1	1 mg 5 mg	25.00 90.00
153699 **RT**	**3-HYDROXYBENZYLHYDRAZINE** [81012-99-9] (α-Hydrazino-m-cresol) **Dihydrochloride** Centrally acting dopamine decarboxylase inhibitor; penetrates the bloodbrain barrier. $C_7H_{10}N_2O$ • 2HCl MW 211.1	250 mg	20.00
158932 **RT**	**(±)-4-HYDROXYDEBRISOQUIN** [59333-79-8] **Purity: 99%** Metabolite of debrisoquin. Also an indicator for cytochrome p-450 polymorphism. **Ref.:** 1. Idle, J.R., et.al., Br. J. Clin. Pharmacol., 7257 (1979). 2. Guengerich, F.P., Trends Pharmacol. Sci., **10**, 107 (1989). $C_{10}H_{13}N_3O$ MW 191.2	5 mg 10 mg 25 mg 50 mg	22.95 43.90 106.60 208.70
193664 **RT**	**5-HYDROXYDECANOIC ACID** [624-00-0] **Sodium Salt** A K^+ channel antagonist which blocks the post-ischemic effects of the K^+ channel activator cromakalim. $C_{10}H_{19}O_3Na$ MW 210.2	25 mg 100 mg	22.05 79.40

CATALOG NUMBER			U.S. $
159936 RT	**(±)-7-HYDROXY-2-DIPROPYL-AMINOTETRALIN** [94938-11-7] ((±)-7-OH-DPAT) **Hydrobromide** **Purity: 98%** Selective agonist for D_3 dopamine **Ref.:** Zhuang, Z.P., et al., *J. med. Chem.*, **36**, 1499 (1993). $C_{18}H_{29}NO \bullet HBr$ MW 329.3	5 mg 10 mg 25 mg 50 mg	32.05 51.60 114.65 212.10
158933 RT	**(±)-8-HYDROXY-2-DIPROPYL-AMINOTETRALIN** [87394-87-4] ((±)-8-Hydroxy-DPAT) **Hydrobromide** **Purity: 99%** Specific 5-HT_{1A} agonist. **Ref.:** Middlemiss, D.N., et.al., Eur. J. Pharmacol., **90**, 151 (1983). $C_{16}H_{25}NO \bullet HBr$ MW 328.3	25 mg 50 mg 100 mg	106.30 192.05 366.90
105657 0°C	**6-HYDROXYDOPAMINE** [636-00-0] (2,4,5-Trihydroxyphenethylamine hydrobromide) **Hydrobromide** **Crystalline** **Purity: ~99%** Useful pharmacological tool. Selectively destroys adrenergic receptor sites. $C_8H_{11}NO_3 \bullet HBr$ MW 250.1	50 mg 100 mg 250 mg 500 mg	37.50 56.15 112.35 187.30
153541 0-5°C	**7-(β-HYDROXYETHYL)-THEOPHYLLINE** [519-37-9] (1,3-Dimethyl-7-(β-hydroxyethyl-xanthine) $C_9H_{12}N_4O_3$ MW 224.2	1 g 5 g	11.45 34.40
159937 -20°C	**α-HYDROXYFARNESYL-PHOSPHONIC ACID** [140633-12-1] **Purity: 96%** Potently inhibits farnesyltransferase in certain enzyme assays and in complete cells. It is more selective than geranylgeranyltransferases I and II. **Ref.:** 1. Gibbs, J.B., et al., *J. Biol. Chem.*, **268**, 7617 (1993). 2. Pompliano, D.L., et al., *Biochemistry*, **31**, 3800 (1992). MW 302.4	1 mg	218.00
102004 0°C	**5-HYDROXYINDOLE-3-ACETIC ACID** [66866-39-5] **Dicyclohexylammonium Salt** White crystals **Purity: 99+%** $C_{10}H_9NO_3 \bullet C_{12}H_{23}N$ MW 372.5	100 mg 500 mg 1 g	15.65 55.85 97.05
102005 0°C	**5-HYDROXYINDOLE-3-ACETIC ACID** [1321-73-9] **Free Acid** **Purity: 98-100%** Metabolite of serotonin Light yellow crystals $C_{10}H_9NO_3$ MW 191.2	25 mg 100 mg 500 mg 1 g	10.90 21.20 83.10 126.10
193592 0-5°C	**5-HYDROXY-3-INDOLE ACETIC ACID ELISA KIT** (5-HIAA ELISA) This 5-HIAA enzyme immunoassay kit provides materials for the quantitative measurement of chemically derivatized 5-HIAA in urine. The assay procedure follows the basic principle of competitive ELISA, whereby there is competition between biotinylated and non-biotinylated antigen for a fixed number of antibody binding sites. This kit is a 12 x 8 format. *FOR RESEARCH USE ONLY!*	1 each	585.00

CATALOG NUMBER			U.S. $
159938 RT	**2-(5-HYDROXY-3-INDOLYL)ETHYLTRI-METHYLAMMONIUM IODIDE** (5-HTQ-(N,N,N-trimethylserotinin iodide) **Purity: 98%** Agonist of serotinin 5-HT_3. **Ref.:** Richardson, B.P., et al., *Nature*, **316**, 126 (1985) MW 346.2	5 mg 10 mg 25 mg	59.00 99.75 217.85
102003 0-5°C	**3-HYDROXY-DL-KYNURENINE** [2147-61-7] (α,2-Diamino-3-hydroxy-γ-oxobenzenebutanoic acid) Monamine Oxidase Substrate **Crystalline** $C_{10}H_{12}N_2O_4$ MW 224.2	5 mg 25 mg 100 mg	13.75 48.20 169.70
154151 0-5°C	**6-HYDROXYMELATONIN** [2208-41-5] **Crystalline** Metabolite of melatonin. $C_{13}H_{16}N_2O_3$ MW 248.3	50 mg 100 mg	142.05 250.00
159147 0-5°C	DL-**3-HYDROXY-4-METHOXYMANDELIC ACID** [3695-24-7] (Isovanillylmandelic acid) **Free Acid** **Purity: 99%** $C_9H_{10}O_5$ MW 198.2	250 mg 500 mg 1 g	26.35 45.90 74.55
105689 0-5°C	DL-**4-HYDROXY-3-METHOXY-MANDELIC ACID** [55-10-7] (Vanillylmandelic acid; α,4-Dihydroxy-3-methoxybenzeneacetic acid; VMA) **Crystalline** A metabolite of epinephrine. $C_9H_{10}O_5$ MW 198.2	250 mg 500 mg 1 g 5 g	15.00 25.00 45.00 180.00
159939 0°C	**2-HYDROXYMYRISTIC ACID** [2507-55-3] (DL-α-Hydroxymyristic acid; 2-Hydroxytetradecanoic acid) **Purity: 98%** A posttranslational modification reagent which inhibits protein myristoylation after metabolic activation. A useful tool for differentiating myristoylation and palmitoylation of proteins. It prevents p56 mediated signal transduction and stops *Varicella zoster* virus replication. **Ref.:** 1. Abraham, N. and Veillette, A., *Mol. Cell. Bio.*, **10**, 5197 (1990). 2. Spiegel, A.M., et al., *Trends Biochem. Sci.*, **16**, 338 (1991). 3. Paige, L.A., et al., *J. Biol. Chem.*, **268**, 8669 (1993). $C_{14}H_{28}O_3$ MW 244.4	10 mg 25 mg 50 mg	21.45 45.30 82.60
	1-HYDROXY-2-OXO-3-(3-AMINOPROPYL)-3-ISOPROPYL-1-TRIAZENE *See*: NOC-5		
159942 -20°C	**4-HYDROXYPHENYLRETINAMIDE** [65646-68-6] **Purity: 97%** Demonstrates anti-proliferative activity on human breast cancer cells in culture. Induces malignant hemopoietic cell line apoptosis. **Ref.:** 1. Marth, C., et al., *J. Natl. Cancer Inst.*, **75**, 871 (1985). 2. Grubbs, C.J., et al., *Anticancer Res.*, **10**, 661 (1990). 3. Delia, D., et al., *Cancer Res.*, **53**, 6036 (1993). MW 391.5	1 mg 5 mg 10 mg	39.85 181.10 315.30
	2-HYDROXYSACLOFEN *See*: 3-Amino-2-(4-chlorophenyl)-2-hydroxypropane-sulfonic acid		

CATALOG NUMBER			U.S. $
	HYDROXYTACRINE	25 mg	36.15
153690	[112964-99-5]	50 mg	57.80
RT	(HP-029)	100 mg	108.45
	(9-Amino-1,2,3,4-tetrahydro-acridine-1-(2H)-ol maleate)		
	Maleate Salt		
	Cholinesterase inhibitor		
	$C_{13}H_{14}N_2O \bullet C_4H_4O_4$ MW 330.3		
	5-HYDROXYTRYPTAMINE	25 mg	15.00
153765	[153-98-0]	50 mg	25.00
0-5°C	(Serotonin HCl)	100 mg	40.00
	Hydrochloride	250 mg	81.00
	A neurotransmitter	1 g	225.00
	$C_{10}H_{12}N_2O \bullet HCl$ MW 212.7		
	5-HYDROXYTRYPTAMINE	100 mg	16.00
102885	[3036-16-6]	1 g	115.00
0-5°C	(Serotonin hydrogenoxalate)		
	Oxalate Salt		
	Light tan crystals		
	$C_{10}H_{12}N_2O \bullet C_2H_4O_4$ MW 266.3		
	5-HYDROXY-L-TRYPTOPHAN	250 mg	9.50
100751	[4350-09-8]	1 g	17.00
0°C	**Purity: 99%**	5 g	50.00
	Crystalline	25 g	199.00
	Precursor of serotonin		
	$C_{11}H_{12}N_2O_3$ MW 220.2		
	25-HYDROXYVITAMIN D_3	1 mg	63.05
158934	[19356-17-3]	5 mg	286.65
-20°C	**Purity: 99%**		
	Essential intermediate of 1α,25-dihydroxyvitamin D_3 biosynthesis. Also appears as a circulating metabolite of vitamin D_3.		
	Ref.: DeLuca, H.F., et.al., J. Clin. Invest., **48**, 1273 (1969).		
	MW 400.6		
	HYGROMYCIN B	250 KU	45.00
157513	[31282-04-9]	1 MU	143.55
RT	**Purity: ≥ 85%**	5 MU	627.65
	Aqueous solution, approx. 450,000 units/ml. $C_{20}H_{37}N_3O_{13}$ MW 527.5		
	$C_{20}H_{37}N_3O_{13}$ MW 527.5		
	HYPERICIN	1 mg	77.00
193423	[548-04-9]		
RT	From *Hypericum perforatum*		
	Purity: >85%		
	Selective inhibitor of Protein Kinase C		
	$C_{30}H_{16}O_8$ MW 504.5		
	HYPOTAURINE	100 mg	75.00
159711	[300-84-5]	250 mg	150.00
RT	(2-Aminoethylsulfinic acid)		
	Crystalline		
	$C_2H_7NO_2S$ MW 109.2		

CATALOG NUMBER			U.S. $
	-I-		
	IBERIOTOXIN	100 µg	590.50
158935	[129203-60-7]		
-20-0°C	From *Buthus tamulus* Scorpion		
	Purity: 98%		
	More specific than charybdotoxin at inhibiting high conductance Ca^{2+}-activated K^+ channel via allosteric inhibition.		
	Ref.: Galvez, A., et.al., J. Biol. Chem., **265**, 11083 (1990).		
	MW 4231.8		
	IBOTENIC ACID	1 mg	79.00
190215	[2552-55-8]	5 mg	239.00
RT	(α-Amino-3-hydroxy-5-isoxazole acetic acid)		
	Isolated from wild *Amanita pantherino*.		
	Crystalline		
	Purity: ~95%		
	Used in study of the GABA-nergic system. Also see: Muscimol.		
	$C_5H_6N_2O_4$ MW 158.1		
	IBUPROFEN	1 g	15.90
190216	[15687-27-1]	5 g	60.20
RT	(α-Methyl-4-[2-methylpropyl] benzeneacetic Acid)	10 g	107.45
	Crystalline		
	An anti-inflammatory and analgesic. Also inhibits cyclooxygenase, PGH synthase-1 and PGH synthase -2.		
	$C_{13}H_{18}O_2$ MW 206.3		
	RS-IBUPROFEN [^{3}H(G)]	250 µCi	653.65
26039	Sp. Act. 100-500 mCi/mmol	1 mCi	1575.35
0-5°C	3.70-18.5 TBq/mmol		
	Ethanol solution.		
	Please call for delivery information.		
	MW 206.3		
	R(-)-IBUPROFEN [Carboxy-^{14}C]	50 µCi	1211.55
16021	Sp. Act. 50-60 mCi/mmol		
0-5°C	1.85-2.22 TBq/mmol		
	Ethanol solution.		
	Please call for delivery information.		
	$CH_3CHCH_2C_6H_4CH(CH_3)CO_2H$ MW 206.3		

CATALOG NUMBER			U.S. $
16022 **0-5°C**	**RS-IBUPROFEN [Carboxy-^{14}C]** (4-Isobutyl-α-methylphenylacetic acid) Sp. Act. 50-60 mCi/mmol 1.85-2.22 TBq/mmol Ethanol solution. *Please call for delivery information.* $CH_3CHCH_2C_6H_4CH(CH_3)$**C**O_2H MW 206.3	50 µCi 250 µCi	605.15 1575.35
16023 **0-5°C**	**S(+)-IBUPROFEN [Carboxy-^{14}C]** (4-Isobutyl-α-methylphenylacetic acid) Sp. Act. 50-60 mCi/mmol 1.85-2.22 TBq/mmol Ethanol solution. *Please call for delivery information.* $CH_3CHCH_2C_6H_4CH(CH_3)$**C**O_2H MW 206.3	50 µCi	605.15
195865 **-20°C**	**ICE INHIBITOR** (CPP32/Apopain Inhibitor; Ac-DEVD-CHO) Ac-Asp-Glu-Val-Asp-CHO **Purity: ≥97%** Potent, specific and reversible CPP32/Apopain inhibitor. $C_{20}H_{30}N_4O_{11}$ MW 502.5	1 mg	98.00
195870 **-20°C**	**ICE INHIBITOR I** [143313-51-3] (Ac-YVAD-CHO; Caspase Inhibitor I) Ac-Tyr-Val-Ala-Asp-CHO **Purity: ≥97%** Inhibits Interleukin 1β Converting Enzyme (ICE). $C_{24}H_{32}N_4O_9$ MW 520.5	1 mg 5 mg	89.25 273.00
195872 **-20°C**	**ICE INHIBITOR II** (Ac-YVAD-CMK) Ac-Tyr-Val-Ala-Asp-CMK **Purity: ≥97%** **Biotinylated** Inhibits Interleukin 1β Converting Enzyme (ICE) irreversibly. MW 724.3	1 mg 5 mg	110.25 341.25
195873 **-20°C**	**ICE INHIBITOR III** Ac-Tyr-Val-Ala-Asp-Acyloxymethylketone **Purity: ≥90%** Selectively and strongly inhibits Interleukin 1β Converting Enzyme (ICE). MW 761.7	1 mg	98.00
195868 **-20°C**	**ICE SUBSTRATE** (CPP32/Apopain Substrate; Ac-DEVD-AMC) Ac-Asp-Glu-Val-Asp-AMC **Purity: ≥97%** Fluorometric substrate for CPP32/Apopain and related cysteine proteases. $C_{30}H_{37}N_5O_{13}$ MW 675.6	1 mg	79.00
159785 **0-5°C**	**IFENPRODIL** [23210-56-2] NMDA receptor antagonist. **Ref.:** Graham, et al., Eur. J. Pharm., **226**, 373 (1992). $C_{21}H_{27}NO_2$ MW 325.4	5 mg 10 mg 25 mg	40.10 71.65 143.30
159947 **-20°C**	**ILIMAQUINONE** [71678-03-0] **Purity: 99%** Completely and reversibly induces the breakdown of Golgi membranes. Inhibits the association of β-COP and ADP-ribosylation factor to Golgi membranes. It does not induce the redistribution of Golgi membranes into the endoplasmic reticulum or the random fusion of adjacent Golgi cisternae. **Ref.:** 1. Takizawa, P.A., et al., *Cell*, **73**, 1 (1993). 2. Veit, B., et al., *J. Biol. Chem.*, **122**, 1197 (1993). MW 358.5	100 µg	138.85

CATALOG NUMBER			U.S. $
193666 **RT**	**IMETIT** [102203-18-9] (S-[2-(Imidazol-4-yl)ethyl]isothiourea) **Dihydrobromide** Potent, selective H_3 histamine receptor agonist. $C_6H_{10}N_4S$ • 2HBr MW 332.1	1 mg 5 mg 10 mg	14.25 44.10 79.40
193667 **RT**	**IMIDAZOLE-4-ACETIC ACID** [3251-69-2] **Hydrochloride** A $GABA_C$ antagonist. $C_5H_6N_2O_2$ • HCl MW 162.6	25 mg 100 mg	24.25 72.75
159948 **RT**	**6-[2-(4-IMIDAZOYL)ETHYLAMINO]-N-(4-TRIFLUOROMETHYLPHENYL)-HEPTANE CARBOXAMIDE** (HTMT) **Dimaleate Salt** **Purity: 98%** Receptor agonist to the histamine H_1. **Ref.:** 1. Khan, M.M., et al., *J. Immunol.*, **137**, 308 (1986). 2. Qiu, R., et al., *J. Pharmacol. Exp. Therap.*, **253**, 1245 (1990). MW 614.6	1 mg 5 mg	18.95 73.35
193668 **RT**	**N^5-(1-IMINOETHYL)-L-ORNITHINE** [36889-13-1] (L-NIO) **Hydrochloride** **Purity: ≥98%** Powerful inhibitor of endothelial nitric oxide synthase. $C_7H_{15}N_3O_2$ • 2HCl MW 246	1 mg 5 mg	22.85 89.25
193669 **RT**	**2-IMINOPIPERIDINE** **Hydrochloride** A nitric oxide synthase inhibitor, with selectivity for the inducible form (iNOS). $C_5H_{10}N_2$ • HCl MW 134.6	1 mg 5 mg 25 mg	6.75 15.75 41.00
26040 **0-5°C**	**IMIPRAMINE [N-Methyl-^{3}H]** **Hydrochloride** Sp. Act. 70-90 Ci/mmol 2.59-3.33 TBq/mmol Ethanol solution. *Please call for delivery information.* MW 316.9	250 µCi 1 mCi	641.55 1575.35
190218 **RT**	**IMIPRAMINE** [113-52-0] (10,11-Dihydro-N,N-dimethyl-dibenz[b,f]azepine-5-propanamine) **Hydrochloride** **Crystalline** A serotonin uptake inhibitor. $C_{19}H_{24}N_2$ • HCl MW 316.9	5 g 25 g 100 g	14.65 46.75 129.50
193671 **0-5°C**	**INDATRALINE** [96850-13-4] **Hydrochloride** Inhibitor of dopamine, norepinephrine and serotonin uptake. $C_{16}H_{15}NCl_2$ • HCl MW 328.7	1 mg 5 mg	12.50 47.40
152287 **0°C**	**INDO 1** [132319-56-3] (1-[2-Amino-5-(6-carboxyindol-2-yl)phenoxy]-2-(2′-amino-5′-methylphenoxy)ethane-N,N,N′,N′-tetraacetic acid) **Pentasodium Salt** Calcium chelator and indicator. Unusually large shift in fluorescence emission from 480 nm to 400 nm makes INDO 1 useful for spectrofluorometric determinations of calcium. $C_{32}H_{26}N_3O_{12}Na_5$ MW 759.6	1 mg	87.25

CATALOG NUMBER			U.S. $
152288 RT	**INDO 1-AM** [112926-02-0] The acetoxymethyl ester of INDO 1. Able to permeate cell membranes, is then rapidly hydrolyzed by cytoplasmic esterases, releasing INDO 1 inside the cell, where it remains trapped. $C_{47}H_{51}N_3O_{22}$ MW 1009.9	1 mg	104.95
159601 0°C	**(+)-INDOLACTAM V** [90365-56-3] **Purity: 99+%** $C_{17}H_{23}N_3O_2$ MW 301.4	1 mg	148.90
159602 0°C	**(-)-INDOLACTAM V** [90365-57-4] **Purity: 99+%** Activates protein kinase C $C_{17}H_{23}N_3O_2$ MW 301.4	1 mg	115.85
190217 RT	**INDOMETHACIN** [53-86-1] (1-[p-Chlorobenzoyl]-5-methoxy-2-methylindole-3-acetic acid) **Crystalline** Inhibitor of cyclooxygenase. $C_{19}H_{16}ClNO_4$ MW 357.8	1 g 5 g 10 g 25 g 100 g	14.05 21.50 35.85 64.90 170.45
151325 0°C	**INGENOL** [30220-46-3] A weak Protein Kinase C activator. *POSSIBLE CARCINOGEN!* $C_{20}H_{28}O_5$ MW 348.4	1 mg 5 mg	60.00 238.95
159603 RT	***scyllo*-INOSITOL** [488-59-5] (Scyllitol) $C_6H_{12}O_6$ MW 180.2	1 mg 5 mg	9.50 18.75
102052 RT	D-***myo*-INOSITOL** [87-89-8] (i-Inositol; *myo*-Inositol; meso-Inositol) A lipotropic agent. $C_6H_{12}O_6$ MW 180.2	50 g 100 g 500 g 1 kg	14.85 21.80 78.40 141.25
158353 0-5°C	D-***myo*-INOSITOL 1,3,4,5-TETRAPHOSPHATE** [135269-51-1] Ins (1,3,4,5,)P_4 **Potassium Salt** **Synthetic** **Purity: >99%** as per ^1H and ^{31}P NMR. Enantiomerically pure. $[\alpha]_D^{20}$= -3.6° (c= 5.5, pH 8.3) **Ref:**(1) Irvine, R.F., et. al., (1986), *Nature*, **320**, 631. (2)Hansen, C.A., et. al., (1986), *J. Biol. Chem.*, **261**, 8100. (3)Cerdan, S., et. al., (1986), *J. Biol. Chem.*, **261**, 14676. (4)Higashida, H. and Brown, D.A., (1986), *FEBS*, **208**, 283. (5)Irvine, R.F. and Moor, R.M., (1986), *Biochem. J.*, **240**, 917. $C_6H_8O_{18}P_4K_8$ MW 804.8	1 mg	751.20
195687 0°C	D-***myo*-INOSITOL-1,4,5-TRIPHOSPHATE** [103476-24-0] (IP_3) **Hexapotassium Salt** **Purity: 99%** Stimulates the release of calcium ions from intracellular stores. MW 648.6	1 mg	373.85
195688 0°C	D-***myo*-INOSITOL-1,4,5-TRIPHOSPHATE** [108340-81-4] (IP_3) **Hexasodium Salt** **Purity: 99%** MW 552.0	1 mg	212.75
195689 -20°C	D,L-***myo*-INOSITOL-1,4,5-TRIPHOSPHOROTHIOATE** ($InsP_3S_3$) **Hexatriethylamine Salt** **Purity: 98%** IP_3 analog which is resistant to metabolic enzymes, thus, has an extended duration of action. It resists IP_3 kinase and 5-phosphatase which it potently inhibits. MW 694.3	1 mg	273.00
158352 0-5°C	D-***myo*-INOSITOL 1,3,4-TRISPHOSPHATE (IP_3)** [140385-74-6] **Hexapotassium Salt** Ins(1,3,4)P_3 **Synthetic** **Purity: >99%** as per ^1H and ^{31}P NMR. $[\alpha]_D^{20}$= +13.6° (c = 2, pH 8.2) **Ref:** Rossier, M.F., et. al., (1986), *Biochem. Biophys. Res. Commun.*, **139**, 259. $C_6H_9O_{15}P_3K_6$ MW 648.6	100 µg	192.25
158354 0-5°C	D-***myo*-INOSITOL 1,4,5-TRISPHOSPHATE** **Tripotassium Salt** Ins (1,4,5)P_3 **Synthetic** Enantiomerically pure. Greater than 99% pure as per ^1H and ^{31}P NMR Functions as a second messenger in the release of calcium from intracellular organelles; has been implicated as a mediator of phototransduction in *Limulus* photoreceptors where it effects changes in ion permeability and sodium ion currents. Soluble in water. **Ref:** 1.Berridge, M.J. and Irvine, R.F., (1984), *Nature*, **312**, 315. 2.Brown, J.E., et al., (1984), *Nature*, **311**, 160. 3. Grado, C. and Ballou, C.E., (1961), *J. Biol. Chem.*, **236**, 54. 4. Tomlinson, R.V. and Ballou, C.E., (1961), *J. Biol. Chem.*, **236**, 1902. 5. Brockerhoff, H. and Ballou, C.E., (1961), *J. Biol. Chem.*, **236**, 1907.	1 mg	156.50
159606 0°C	D-***myo*-INOSITOL 1,4,5-TRISPHOSPHATE** [112571-69-4] **Triammonium Salt** **Purity: 99+%** $C_6H_{12}O_{15}P_3 \bullet (NH_4)_3$ MW 471.2	1 mg	86.00
154602 0°C	D-***myo*-INOSITOL-1,4,5-TRISPHOSPHATE** [103476-24-0] (L-α-Phosphatidylinositol 4,5-bisphosphate) **From Bovine Brain** **Tripotassium Salt** **Purity: ~98%** Contains less than 1% of the 2,4,5-isomer. Reported to stimulate selective and specific mobilization of intracellular calcium. Involved in cell growth and oncogenesis. **Ref.:** 1. Vacca, et al., J. Am. Chem. Soc., **109**, 3478 (1987). 2. Abdel-Latif, Pharmacol. Rev., **38**, 227 (1986). 3. Berridge, M.J. and Irvine, R.F., Nature, **312**, 315 (1984).	100 µg	108.45
159607 0°C	L-***myo*-INOSITOL 1,4,5-TRISPHOSPHATE** [129828-71-3] **Hexapotassium Salt** **Purity: 99%** Unnatural enantiomer of IP_3 $C_6H_9O_{15}P_3K_6$ MW 648.6	1 mg	94.00

CATALOG NUMBER			U.S. $
693231 **0-5°C**	**β3-INTEGRIN** *MONOCLONAL ANTIBODY* **Anti-Human** **Clone:** BB10 **Isotype:** mouse IgG_1 presented affinity purified **Conc/Titer:** 1 µg/10 µl **Applications:** Immunohistochemistry; Immunoblotting The original immunogen was a partially purified platelet glycoprotein IIb/IIIa complex. The antibody reacts with beta-3-integrin including the GPIIIa of platelets.	10 µg	83.95
159949 **-20°C**	**m-IODOBENZYLGUANIDINE** [80663-95-2] (MIBG) **Hemisulfate Salt** **Purity: 98%** Arginine specific mono-ADP-ribosyltransferase competitive inhibitor. Antitumor agent which prevents ADP-ribosylation-dependent signal transduction pathways. **Ref.:** 1. Smets, L.A., et al., *Biochim. Biophys. Acta*, **1054**, 49 (1990). 2. Loesberg, C., et al., *Biochim. Biophys. Acta*, **1037**, 92 (1990). 3. Halldorsson, H., et al., *FEBS Lett.*, **314**, 322 (1992). $C_8H_{10}IN_3 \bullet 1/2H_2SO_4$ MW 324.1	1 mg 5 mg	25.00 105.00
153686 **RT**	**p-IODOCLONIDINE** [108294-53-7] (2-[(2,6-Dichloro-4-iodophenyl)imino]-imidazoline) **Hydrochloride** An α_2-adrenergic agonist. $C_9H_8Cl_2N_3I \bullet HCl$ MW 392.5	5 mg 10 mg 25 mg	25.35 43.35 86.75
193673 **0-5°C**	**2-IODOMELATONIN** [93515-00-5] A melatonin agonist. $C_{13}H_{15}N_2O_2I$ MW 358.2	5 mg 25 mg	27.55 110.25
158937 **0°C**	**1-(5-IODONAPHTHALENE-1-SULFONYL)-1H-HEXAHYDRO-1,4-DIAZEPINE** [110448-33-4] (ML-7) **Hydrochloride** **Purity: 99%** Strongly and specifically inhibits MLC kinase. **Ref.:** Saitoh, M., et.al., J. Biol. Chem., **262**, 7796 (1987). $C_{15}H_{17}N_2O_2IS \bullet HCl$ MW 452.7	5 mg	48.00
158938 **RT**	**1-(4-IODOPHENYL)-3-(2-ADAMANTYL)GUANIDINE** **Purity: 99%** σ-receptor antagonist. **Ref.:** Wilson, A.A., et.al., J. Med. Chem., **34**, 1867 (1991).	10 mg 50 mg	135.00 562.50
153683 **0-5°C**	**5-IODOTUBERCIDIN** [24386-93-4] (ITU; 4-Amino-5-iodo-7-(β-D-ribo-furanosyl)pyrrolo[2,3-d]-pyrimidine) **Purity: ≥98%** Adenosine kinase inhibitor. $C_{11}H_{13}IN_4O_4$ MW 392.2	1 mg 5 mg	75.00 345.00
155069 **0°C**	**3-IODO-L-TYROSINE** [70-78-0] (3-Monoiodo-L-tyrosine) **Crystalline** **Purity: ~97%** May contain up to 3% tyrosine. $C_9H_{10}INO_3$ MW 307.1	1 g 5 g	20.50 69.00

CATALOG NUMBER			U.S. $
159611 **0-5°C**	**IONOMYCIN** [56092-81-0] **Free Acid** **Purity: 90+%** Selective calcium ionophore $C_{41}H_{72}O_9$ MW 709.0	1 mg	126.10
155070 **0-5°C**	**IONOMYCIN** [56092-82-1] **Calcium Salt** From *Streptomyces conglobatus* A polyether ionic antibiotic that exhibits an affinity for Ca^{2+}. **Ref.:** Toeplitz, B.K., et al., J. Am. Chem. Soc., **101**, 3344 (1979). U.S. Patent No. 3,873,693. $C_{41}H_{70}O_9Ca$ MW 747.1	1 mg 5 mg	60.00 240.00
153682 **RT**	**IPRATROPIUM BROMIDE** [22254-24-6] (3-(3-Hydroxy-1-oxo-2-phenyl-propoxy)-8-methyl-8-(1-methyl-ethyl)-8-azoniabicyclo[3.2.1]-octane bromide) Anticholoinergic $C_{20}H_{30}BrNO_3$ MW 412.4	25 mg 50 mg 100 mg	31.80 56.40 101.25
153538 **0-5°C**	**IPRONIAZID PHOSPHATE** [305-33-9] **Crystalline** Monoamine Oxidase inhibitor $C_9H_{13}N_3O \bullet H_3PO_4$ MW 277.2	250 mg 1 g	10.90 21.75
195262 **0°C**	**3-ISOBUTYL-1-METHYLXANTHINE** [28822-58-4] (IBMX) **Crystalline** Inhibits cyclic-AMP phosphodiesterase. **Ref.:** 1. Beavo, J.A., et al., Molec. Pharmacol., **6**, 597 (1970); 2. Montague, W. and Cook, J.R., Biochem. J., **122**, 115 (1971). $C_{10}H_{14}N_4O_2$ MW 222.2	100 mg 250 mg 1 g 5 g	15.00 30.00 83.00 330.00
153685 **0-5°C**	**ISOGUVACINE** [64603-90-3] **Hydrochloride** GABA agonist $C_6H_9NO_2 \bullet HCl$ MW 163.6	5 mg 10 mg 25 mg	17.35 28.85 57.80
151362 **RT**	**ISONIPECOTIC ACID** [498-94-2] (Hexahydroisonicotinic acid) **Crystalline** **Purity: 99%** GABA agonist $C_6H_{11}NO_2$ MW 129.2	10 g 25 g 100 g	20.00 40.00 120.00
193675 **0-5°C**	**ISOPROPYLAMINE *bis*(NITRIC OXIDE) ADDUCT** Releases Nitric Oxide (NO) into aqueous solutions. $C_{12}H_{30}N_4O_2$ MW 262.4	5 mg 25 mg	26.45 101.45
151368 **RT**	**DL-ISOPROTERENOL** [51-30-9] (Isopropylarterenol) **Hydrochloride** **Crystalline** A Bronchodilator $C_{11}H_{17}NO_3 \bullet HCl$ MW 247.7	5 g 25 g	50.00 150.00
151366 **RT**	**L-(-)-ISOPROTERENOL D-(+)-BITARTRATE** [54750-10-6] **Dihydrate** **Crystalline** $C_{11}H_{17}NO_3 \bullet C_4H_6O_6 \bullet H_2O$ MW 379.3	100 mg 500 mg	11.00 34.50

CATALOG NUMBER			U.S. $
158939 0°C	**1-(5-ISOQUINOLINE-SULFONYL)-HOMOPIPERAZINE** [103745-39-7] (HA-1077) **Dihydrochloride** **Purity: 98%** Specific inhibitor of PKA and PKG. Potent vasodilator. **Ref.:** 1. Asano, T., et.al., Br. J. Pharmacol., **98**, 1091 (1989). 2. Sasaki, Y. and Sasaki, Y., Biochem. Biophys. Res. Commun., **171**, 1182 (1990). 3. Asano, T., et.al., J. Pharmacol. Exp. Ther., **241**, 1033 (1987). $C_{14}H_{17}N_3O_2S$ • 2HCl MW 364.3	10 mg 25 mg 50 mg	133.05 315.30 604.85
158940 0°C	**1-(5-ISOQUINOLINE-SULFONYL)-2-METHYLPIPERAZINE** [108930-17-2] (H-7) **Dihydrochloride** **Purity: 99%** Inhibitor of PKA, PKG, MLCK, and protein kinase C. **Ref.:** Hidaka, H., et.al., Biochemistry, **23**, 5036 (1984). $C_{14}H_{17}N_3O_2S$ • 2HCl MW 364.3	5 mg 25 mg 100 mg	48.00 188.00 595.00
159612 0-5°C	**1-(5-ISOQUINOLINESULFONYL)-3-METHYLPIPERAZINE** [140663-38-3] (Iso-H7) **Dihydrochloride** **Purity: 99%** Isomer of H7 [see 1-(5-Isoguinolinesulfonyl)-2-methylpiperazine] which exhibits inhibition of PKC. $C_{14}H_{17}N_3O_2S$ • 2HCl MW 364.3	5 mg 25 mg	48.00 188.00
159613 0°C	**1-(5-ISOQUINOLINESULFONYL)-PIPERAZINE** [84468-24-6] (HA-100) **Dihydrochloride** **Purity: 99%** Inhibits myosin light-chain kinase. $C_{13}H_{15}N_3O_2S$ • 2HCl MW 350.2	5 mg 25 mg	32.00 125.00
159950 -20°C	**ISOTETRANDINE** **Purity: 98%** Biscoclaurine alkaloid which inhibits the activation of phospholipase A_2 by G protein. It does not inhibit the G protein activation of phospholipase C or D. **Ref.:** 1. Akiba, S., et al., *Biochem. Pharmacol.*, **44**, 45 (1992). 2. Hashizume, T., et al., *Biochem. Pharmacol.*, **41**, 419 (1991). MW 622.8	1 mg 5 mg	45.30 200.65
151373 -20-0°C	**ISOTOCIN** [550-21-0] (Cys-Tyr-Ile-Ser-Asn-Cys-Pro-Ile-Gly-NH_2) Contains Cys^1-Cys^6 disulfide bond. **Ref:** Guttman, S., et al., Experentia, **18**, 445 (1962). $C_{41}H_{63}N_{11}O_{12}S_2$ MW 966.1	0.5 mg 1 mg	59.45 91.70
153687 RT	**ISOXANTHOPTERIN** [529-69-1] $C_6H_5N_5O_2$ MW 179.1	10 mg 25 mg	15.00 30.00
196009 0-5°C	**IVERMECTIN** [70288-86-7] (22,23-Dihydroavermectin B_1) **Purity: ≥95%** Antiparasitic and macrolide antiobiotic. Semisynthetic derivative of avermectin B_{1a} and B_{1b}. $C_{48}H_{74}O_{14}S$ MW 875.1	250 mg 1 g	10.50 30.00

CATALOG NUMBER			U.S. $
	-J-		
151380 0-5°C	**JOSAMYCIN** [16846-24-5] (Leucomycin V,3-aceta 4^B-(3-methyl butanoate)) (Leucomycin A_3) From *Streptomyces narbonensis* m.p. 130-133°C Macrolide antibiotic **Ref.:** K.C. Nicolau, et al., J. Am. Chem. Soc., **103**, 1,222 (1981). MW 828.0	50 mg 500 mg 1 g	14.05 104.95 201.80
	-K-		
158942 0°C	**K-252a** [97161-97-2] **Purity: 99%** Inhibitor of PKA, PKG, MLCK, CaMK, and phosphorylase kinase. **Ref.:** 1.Kase, H., et.al., Biochem. Biophys. Res. Commun., **165**, 1207 (1989). 2. Yamada, K., et.al., ibid., **144**, 35 (1987). 3. Hashimoto, Y., et.al., ibid., **181**, 423 (1991). 4. Elliot, L.H., et.al., ibid., **171**, 148 (1990). MW467.5	100 µg 1 mg	206.35 814.05
158943 0°C	**K-252b** [99570-78-2] **Purity: 99%** Inhibitor of PKA, PKG, MLCK, and PKC. **Ref.:** Kase, H., et.al., Biochem. Biophys. Res. Commun., **142**, 436 (1987). MW 453.5	100 µg 250 µg	206.35 412.70
195264 RT	**KAINIC ACID** [487-79-6] (2-Carboxyl-3-carboxymethyl-4-isopropenylp yrrolidine) **Crystalline** A minor amino acid found in Digenea simplex seaweed. $C_{10}H_{15}NO_4$ MW 213.2	100 mg 500 mg 1 g	42.00 178.50 309.75
151389 -20-0°C	**KEMPTIDE** [65189-71-1] (Phosphate Acceptor Peptide; Leu-Arg-Arg-Ala-Ser-Leu-Gly) **Ref.:** Kemp, B.E., et al., Fed. Proc., **35**, 1384 (1976).	1 mg 5 mg 10 mg 25 mg	41.45 127.50 229.70 459.40
159614 0°C	**[Trp^4]-KEMPTIDE** [80224-16-4] Leu-Arg-Arg-Trp-Ser-Leu-Gly Substrate for cAMP-dependent protein kinase. **Ref.:** Wright, D.E., et al., *Proc. Nat. Acad. Scr. USA*, **78**, 6048 (1981)	1 mg	80.25
153681 RT	**KETAMINE** [6740-88-1] (2-(2-Chlorophenyl)methyl-amino)cyclohexanone) **Hydrochloride** NMDA antagonist $C_{13}H_{16}ClNO$ • HCl MW 274.2	100 mg 1 g	12.00 24.00
153680 0-5°C	**KETANSERIN TARTRATE** [83846-83-7] (3-[2-(4-Fluorobenzoyl)-1-piperdinyl]-ethyl]-2, 4(1H,3H)-quinazolinedione tartrate) Blocks 5-HT_2 serotonin receptors. $C_{22}H_{22}FN_3O_3$ • $C_4H_6O_6$ MW 545.5	10 mg 25 mg 50 mg	28.00 55.00 99.00
159158 RT	**KETOCONAZOLE** [65277-42-1] **Purity: 99%** Cytochrome P^{450} inhibitor and demonstrates anti-psoriatic activity **Ref.:** 1. Lambert, A., et.al., Biochem. Pharmacol., **35**, 3999 (1986). 2. Van Wauwe, J.P. and Janssen, P.A.J., J. Med. Chem., **32**, 2231 (1989). 3. Tucker, W.F.G., et.al., Br. Med. J., **293**, 882 (1986). $C_{26}H_{28}N_4O_4Cl_2$ MW 531.4	50 mg 100 mg 500 mg 1 g	28.65 48.70 212.10 350.00

CATALOG NUMBER | | | U.S. $

KETOTIFEN 250 mg 28.00
155155 [34580-14-8] 500 mg 42.00
RT **Fumarate Salt** 1 g 68.00
An H_1 Histamine receptor antagonist that inhibits the anaphylactic release of histamine.
$C_{19}H_{19}NOS \bullet C_4H_4O_4$ MW 425.5

KIFUNENSINE 1 mg 342.80
159952 [109944-15-2]
-20°C **Purity: 98%**
Immunomodulator which inhibits α-mannosidase and asparagine-linked oligosaccharide processing.
Ref.: 1. Iwami, M., et al., *J. Antibiot.*, **40**, 612 (1987).
2. Chandrosekaran, S., et al., *J. Biol. Chem.*, **269**, 3356 (1994).
MW 232.2

KINETENSIN 1 mg 31.85
154464 [103131-69-7]
0-5°C H_2N-Ile-Ala-Arg-Arg-His-Pro-Tyr-Phe-Leu-OH

Neurotensin-related peptide which increases vascular permeability and releases histamine from rat mast cells.
Ref.: Carraway, R.E., et al., (1987), JBC, **262**, 5968
MW 1172.5

KN-62 1 mg 78.10
158944 [127191-97-3] 5 mg 350.00
0°C (1-(N,O-bis-[5-isoquinolinesulfonyl]-N-methyl-L-tyrosyl)-4-phenyl-piperazine)
Purity: 98%
Potently and specifically inhibits Ca^{2+}/calmodulin kinase II.
Ref.: Tokumitsu, H., et.al., J. Biol. Chem., **265**, 4315 (1990).
$C_{38}H_{35}N_5O_6S_2$ MW 721.8

KN-93 250 µg 52.50
196012 [139298-40-1] 1 mg 147.00
0-5°C (N-[2-(N-(4-Chlorocinnamyl)-N-methylaminomethyl)phenyl]-N-[2-hydroxyethyl]-4-methoxybenzenesulfonamide)
Purity: ≥95%
Selective Ca^{++}/calmodulin-dependent protein kinase II inhibitor. Induces G_1 cell cycle arrest and apoptosis in NIH 3T3 cells.
$C_{26}H_{29}ClN_2O_4S$ MW 501.0

KOJIC AMINE 25 mg 52.00
153679 [68642-64-8] 50 mg 99.05
RT (2-(Aminomethyl)-5-hydroxy-4H-pyran-4-one)**Hydrobromide** 100 mg 187.95
GABA receptor agonist.
$C_6H_7NO_3 \bullet HBR$ MW 222.0

KT 5720 100 µg 172.00
158945 [108068-98-0] 1 mg 991.85
0°C **Purity: 98%**
Hexylester derivative of K-252a which specifically inhibits PKA.
Ref.: 1. Kase, H., et.al., Biochem. Biophys. Res. Commun., **142**, 436 (1987). 2. Yamada, K. and Ishii, A., Jpn. J. Pharmacol., **49**, 263P (1989).
MW 537.6

KT 5823 100 µg 172.00
158946 [126643-37-6]
0°C **Purity: 98%**
Derivative of K-252a and specifically inhibits PKG.
Ref.: Kase, H., et.al., Biochem. Biophys. Res. Commun., **142**, 436 (1987).
MW 495.5

CATALOG NUMBER | | | U.S. $

KT 5926 100 µg 172.00
158947 [126643-38-7] 1 mg 1310.00
0°C **Purity: 98%**
Propylether derivative of K-252a which inhibits multiple kinases being most specific for CaM Kinase II.
Ref.: 1. Kase, H., et.al., Biochem. Biophys. Res. Commun., **142**, 436 (1987). 2. Hashimoto, Y., et.al., ibid., **181**, 423 (1991). 3. Nakanishi, S., et.al., Mol. Pharmacol., **37**, 482 (1990.
MW 525.5

KYNURENIC ACID 250 mg 6.25
102124 [492-27-3] 1 g 16.50
RT (4-Hydroxyquinoline-2-carboxylic acid) 5 g 75.90
Crystalline
$C_{10}H_7NO_3$ MW 189.2

KYOTORPHIN 10 mg 7.65
195268 [70904-56-2] 250 mg 100.00
-20-0°C (Tyr-Arg)
When administered intracisternally to mice, this dipeptide has about 4.2-fold more analgesic potency than met-enkephalin; it promotes the release of met-enkephalin.
Ref. 1. Fournie-Zaluski, M.C., et al., Biochem. Biophys. Res. Commun., **91**, 130 (1979).
2. Takagi, H., et al., Nature, **282**, 410 (1979).

-L-

L-655,238

See: α-Pentyl-4-(2-quinolinylmethoxy)benzenemethanol

LACTACYSTIN 200 µg 291.20
195863 **Synthetic**
-20°C Cell permeable 20S proteasome inhibitor. Induces neurite outgrowth in mouse neuroblastoma cells and inhibits progression of synchronized Neuro 2A cells and MG-63 human osteosarcoma cells beyond the G_1 phase. Appears to induce apoptosis in human monoblast cells.
$C_{15}H_{24}N_2O_7S$ MW 376.4

β-LAPACHONE 1 mg 26.25
196031 [4707-32-8] 5 mg 99.75
-20°C **Purity: ≥98%** 25 mg 367.50
Novel DNA topoisomerase I inhibitor.
MW 242.3

α-LATROTOXIN 40 µg 716.60
193961 From *Latrodectus tredecemguttatus*
-20°C The principal protein component of black Widow spider venom which causes massive neurotransmitter release from a variety of central and peripheral synaptic junctions. It is useful in synaptic vesicle exocytosis studies of numerous neurotransmitters.
Ref.: Frontali, J. Cell. Biol., **68**, 462 (1976).
MW 130 kDa

LATRUNCULIN B 100 µg 56.00
159800 A unique marine toxin found in Red Sea 1 mg 175.00
0-5°C sponge. Acts as an inhibitor of actin polymerization. More potent toxin than the Cytochalasins.
MW 395.5

LAVENDUSTIN A 1 mg 90.20
158815 [125697-92-9] 5 mg 360.40
0°C Lavendustin A is a potent and selective inhibitor of the EGF receptor tyrosine kinase (IC_{50}=11 nM)[1]. It binds to a site on the kinase which is distinct from the ATP and peptide substrate binding sites[2].
Ref: 1.Onada, T., et al., (1989), J. Nat. Prod., **52**, 1252.
2. Hsu, C.-Y.J., et al., (1991), J. Biol. Chem., **266**, 21105.
$C_{21}H_{19}NO_{6\ MW381.4}$

CATALOG NUMBER			U.S. $
159615 **0°C**	**LAVENDUSTIN B** [125697-91-8] (N,N-*bis*(2′-Hydroxybenzyl)-3-aminosalicylic acid) **Purity: 95-97%** Tyrosine kinase inhibitor. May also be used as a negative control for Lavendustin A. $C_{21}H_{19}NO_5$ MW 365.4	1 mg	94.65
159835 **0-5°C**	**LETHAL TOXIN INHIBITING FACTOR** (LTIF) From Opossum Serum (*Didelphis virginiana*) Purified. Single band by SDS-PAGE. Shown to inhibit the lethality of various venoms and toxins. Also acts as histamine blocker when tested on mast cells. As little as 0.5 µg LTIF, when mixed with normally lethal doses of various venoms or toxins, inhibits the lethality of the venom injected IP in mice. MW 66 kDa	10 µg 50 µg	17.20 78.00
151553 **-20-0°C**	**LEUPEPTIN** [103476-89-7] (Acetyl-Leu-Leu-Arg-al) **Hemisulfate** Inhibitor for trypsin, plasmin, papain, and cathepsin B. **Ref:** Kondo, S., et al., Chem. Pharm. Bull., **17**, 1869 (1969). $C_{20}H_{38}N_6O_4 \bullet 1/2H_2SO_4$ MW 475.6	0.5 mg 1 mg 5 mg 25 mg 100 mg	9.00 11.50 45.00 90.00 265.05
195623 **0°C**	**LEUPEPTIN** [147385-61-3] (Acetyl-Leu-Leu-Arg-al) **Trifluoroacetate Salt** **Purity: ≥90%** Inhibitor for trypsin, plasmin, papain, and cathepsin B. $C_{20}H_{38}N_6O_4 \bullet C_2HF_3O_2$ MW 540.6	1 mg 5 mg 25 mg	13.65 47.25 211.50
195624 **0-5°C**	**LEUPEPTIN** [24125-16-4] (Acetyl-Leu-Leu-Arg-al) **Hydrochloride** **Purity: ≥60%** Protease inhibitor. $C_{20}H_{38}N_6O_4 \bullet HCl$ MW 463.0	1 mg 5 mg 25 mg 100 mg	10.00 25.60 83.95 245.20
155228 **RT**	**LEVAMISOLE** [16595-80-5] (L[-]-2,3,5,6-Tetrahydro-6-phenylimidazo[2,1-b]thiazole) **Hydrochloride** **Crystalline** Suitable as an inhibitor of various mammalian alkaline phosphatases. Intestinal alkaline phosphatases are only slightly inhibited. **Ref.:** Van Belle, H., Biochim. Biophys. Acta., **289,** 158 (1972). $C_{11}H_{12}N_2S \bullet HCl$ MW 240.8	5 g 10 g	16.45 27.35
151554 **0°C**	**LEVETIMIDE** **Hydrochloride** Reported useful as a receptor in neurobiochemical research $C_{23}H_{26}N_2O_2 \bullet HCl$ MW 398.9	1 mg 5 mg 10 mg 25 mg	13.50 25.45 47.05 87.50
158948 **0-5°C**	**LINCOMYCIN** [859-18-7] (U-10149A) **Purity: 98%** **Hydrochloride** Active against gram-positive bacteria. Binds to the 50S subunit of bacterial ribosomes and suppresses protein synthesis. $C_{18}H_{34}N_2O_6S \bullet HCl$ MW 443	1 g 5 g	22.35 106.40

CATALOG NUMBER			U.S. $
159177 **-70°C**	**LIPOXIN B_4** [98049-69-5] [5(S), 14(R), 15(S)-Trihydroxyeicosa-6E,8Z,10E,12E-tetraenoic acid] **Purity: >99%** 25µg/ml ethanol $C_{20}H_{32}O_5$ MW 352.5	25 µg	169.00
159178 **-70°C**	**5-LIPOXYGENASE** **From Potato** **Purity: 98%** **Activity:** w/linoleic acid- 24 units/mg protein, w/arachidonic acid- 8 units/mg protein. **Unit Definition:** One unit consumes one µmole of O_2 per minute at 30°C. Supplied in 2M ammonium sulfate and 0.15M potassium phosphate at pH 6.3. **Ref.:** Reddanna, P., et.al., Methods Enzymol., **187**, 268 (1990).	1 mg	1261.25
159179 **-70°C**	**12-LIPOXYGENASE** **From Porcine Leukocytes** **Activity:** ~50 units/mg protein. **Unit Definition:** One unit will convert one nanomole of arachidonic acid to 12-HPETE per minute at 20°C. Supplied in 20mM Tris-HCl, 0.5mM EDTA, PMSF, and DTT at pH 7.2. **Ref.:** Yokoyama, C., et.al., J. Biol. Chem., **261**, 16714 (1986).	100 U	338.25
159180 **-70°C**	**15-LIPOXYGENASE** **From Rabbit Reticulocytes** **Activity:** ~8 KU/mg protein. **Unit Definition:** One unit will convert one nanomole of linoleic acid per minute at 20°C. Supplied in 10mM potassium phosphate buffer at pH 6.3. **Ref.:** 1. Bryant, R.W., et.al., ibid., **257**, 6050 (1982). 2. Schewe, T., et.al., Methods Enzymol., **71**, 430 (1981). 3. Kuhn, H., et.al., J. Biol. Chem., **265**, 18351 (1990).	5 KU	515.95
193677 **RT**	**R-(+)-LISURIDE** [19875-60-6] **Hydrogen Maleate** D_2 Dopamine agonist and a serotonin mixed receptor agonist/antagonist. $C_{20}H_{26}N_4O \bullet C_4H_4O_4$ MW 454.5	5 mg 25 mg	17.65 70.55
193678 **RT**	**S-(-)-LISURIDE** [140387-89-9] Exhibits action as a D_2 dopamine receptor agonist and D_1 dopamine receptor antagonist. Also an α- and β-adrenoceptor antagonist. $C_{20}H_{26}N_4O$ MW 338.4	5 mg 25 mg	17.65 70.55
158949 **0-5°C**	**LOMOFUNGIN** [26786-84-5] (U- 24792) **Purity: 98%** Broad spectrum antibiotic. Also, inhibits RNA synthesis. **Ref.:** Kopecka, M. and Farkas, V., J. Gen. Microbiol., **110**, 453 (1979).	5 mg 10 mg 25 mg 50 mg	53.80 98.40 225.75 410.95
153676 **RT**	**LOPERAMIDE** [34552-83-5] (4-(4-chlorophenyl)-4-hydroxy-N,N-dimethyl-α,α-diphenyl-1-piperidine butanamide) **Hydrochloride** Calcium channel antagonist $C_{29}H_{33}ClN_2O_2 \bullet HCl$ MW 513.5	1 g 5 g	22.95 70.00
193679 **RT**	**LORGLUMIDE** [97964-56-2] **Sodium Salt** A potent, selective non-peptide cholecystokinin receptor antagonist. $C_{23}H_{31}N_2O_4Cl_2Na$ MW 481.4	25 mg 100 mg	41.90 147.75

CATALOG NUMBER | U.S. $

LUBROL 100 g 39.80 / 250 g 79.55
195299 RT
This compound is composed of ethylene oxide condensates of fatty alcohols. Used for dissolving membrane-bound adenylcyclase.
Ref.: Levey, G,S., Biochem. Biophys. Comm., **38**, 86 (1970).

LUCIFERASE 1 mg 110.25
195779 -20°C
Firefly, Recombinant
Crystalline
Purity: ≥95%
Activity: 30 units/mg
Unit Definition: one unit will release 1 nM of pyrophosphate from ATP per minute at 25°C in the presence of 540 µM ATP, 0.1 mM d-luciferin and 5 mM magnesium sulfate.

LUCIFER YELLOW CH 1 mg 10.90 / 10 mg 49.30 / 25 mg 100.30 / 100 mg 358.00
155267 0-5°C
[67769-47-5]
Dilithium Salt
A highly fluorescent dye.
Useful in marking nerve cells.
Ref.: Stewart, W., Cell, **14**, 741 (1978).
$C_{13}H_9N_5O_9S_2Li_2$ MW 457.2

LUCIFER YELLOW CH 1 mg 50.00 / 10 mg 135.00 / 25 mg 242.00
155266 0-5°C
[71206-95-6]
Dipotassium Salt
A highly fluorescent dye.
Useful in marking nerve cells.
Ref.: Stewart, W., Cell, **14**, 741 (1978).
$C_{13}H_9N_5O_9S_2K_2$ MW 521.6

LUFFARIELLOLIDE 1 mg 228.15
159017 -20°C
From *Luffariella sp.*
Purity: 98%
Related structurally to manoalide.
Phospholipase A_2 inhibitor which is partially reversible and less potent than manoalide.
Ref.: Albizati, K.F., et.al., Experentia, **43**, 949 (1987).
MW 386.3

LUZINDOLE 5 mg 46.50 / 10 mg 89.70
193680 -20°C
(N-Acetyl-2-benzyltryptamine)
A melatonin antagonist with high selectivity for melatonin sites in mammalian CNS.
Soluble in ethanol.
$C_{19}H_{20}N_2O$ MW 292.4

LY 83583
See: 6-Anilino-5,8-quinolinedione

LY 171883 10 mg 75.00 / 25 mg 153.00
159181 RT
Purity: 98%
Orally active, specific antagonist of leukotriene D_4.
Ref.: Fleisch, J.H., et.al., J. Pharmacol. Exp. Ther., **233**, 148 (1985).
MW 318.4

L-α-LYSOPHOSPHATIDYL-CHOLINE-γ-O-HEXADECYL 5 mg 73.35 / 10 mg 120.40 / 25 mg 270.60
159182 -20°C
[52691-62-0]
(Lyso-PAF c16;
1-o-Hexadecyl-sn-glycero-3-phosphorylcholine)
Purity: 99%
Inactive PAF metabolite.
Ref.: Wykle, R.L., et.al., Biochem. Biophys. Res. Commun., **100**, 1651 (1981).
$C_{24}H_{52}NO_6P$ MW 481.7

-M-

MAITOTOXIN 5 µg 154.75 / 10 µg 280.90 / 25 µg 676.50
158950 -20-0°C
[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

MALANTIDE 500 µg 89.00 / 1 mg 138.25
159801 0-5°C
(cAMP-Dependent Protein Kinase Substrate)
Arg-Thr-Lys-Arg-Ser-Gly-Ser-Val-Tyr-Glu-Pro-Leu-Lys-Ile
Very potent Protein Kinase substrate.
MW 1634.1

MANGANESE (III) *tetrakis*-(4-BENZOIC ACID)PORPHYRIN 1 mg 10.50 / 5 mg 23.10 / 25 mg 78.75
196048 0-5°C
(MnTBAP)
Purity: ≥95%
Cell permeable SOD mimetic and a selective peroxynitrite scavenger. It is NOT a nitric oxide scavenger.
Ref.: Faulkner, K.M., et al., Jour. of Biol. Act., **269(38)**, 23471-23476 (1994).
$C_{48}H_{30}MnN_4O_8$ MW 845.7

MANGANESE (III) *tetrakis*-(1-METHYL-4-PYRIDYL)PORPHYRIN 1 mg 10.50 / 5 mg 23.10 / 25 mg 109.00
196049 0-5°C
(MnTMPyP)
Purity: ≥95%
Cell permeable SOD mimetic. Catalyzes the dismutation of O_2^- in the presence of excess EDTA.
Ref.: Faulkner, K.M., et al., Jour. of Biol. Act., **269(38)**, 23471-23476 (1994).
$C_{44}H_{42}MnN_8$ MW 737.8

MANOALIDE 1 mg 228.15
158951 -20-0°C
From *Luffariella variabilis*
Purity: ≥95%
Phospholipase A_2 and C inhibitor. Also blocks the release of arachidonate and inhibits calcium channels.
Ref.: 1. Jacobson, P.B., et.al., Biochem. Pharmacol., **39**, 1557 (1990). 2. Wheeler, L.A., et.al., J. Biol. Chem., **262**, 6531 (1987). 3. Glaser, K.B. and Jacobs, R.S., ibid., **36**, 2079 (1987). 4. Lombardo, D. and Dennis, E.A., J. Biol. Chem., **260**, 7234 (1985). 5. Mayer, A.M.S., et.al., J. Pharm. Exp. Ther., **244**, 871 (1988). 6. Bennertt, C., et.al., Pharmacologist, **28**, 538 (1986)
$C_{25}H_{36}O_5$ MW 416.5

MAP-II KINASE 100 µg 750.00
692001 -20°C
ANTIBODY
Anti-Human
Clone: MK12
Isotype: mouse IgG_{2b}
Conc/Titer: 1:5000
Applications: immunoblotting; immunohistology; immunofluorescence
This 42 kDa serine/threonine kinase is tyrosine phosphorylated upon stimulation of cells with EGF, PDGF or insulin. Enzyme activity is dramatically increased upon tyrosine phosphorylation.
A synthetic peptide corresponding to positions 325-345 of the intact MAP kinase was used as the immunogen to produce this antibody. This antibody demonstrates other species reactivity with dog, rat, mouse, chicken and frog.
Ref.: 1. Ray, L.B. and Sturgill, T.W., *Proc. Nat. Acad. Sci. USA*, **84**, 1502-1506(1987). 2. Rossomando, A.J., et al., *Proc. Nat. Acad. Sci. USA*, **86**, 6940-6943 (1989).

CATALOG NUMBER			U.S. $
196017 **-20°C**	**MARGATOXIN** (MgTx) From *Centruroides margaritatus* **Purity: ≥98%** Voltage dependent potassium ion channel blocker specific for Kv1.3 channel. MW 4179	5 µg	204.75
159023 **-20°C**	**MAS 7** (Ile-Asn-Leu-Lys-Ala-Leu-Ala-Ala-Leu-Ala-Ly s-Ala-Leu-Leu-NH_2) **Purity: 98%** An analog of mastoparan with greater potency. **Ref.:** Higashijima, T., et.al., J. Biol. Chem., **265**, 14176 (1990) MW 1635.9	1 mg	143.30
154446 **0-5°C**	**MAST CELL DEGRANULATING PEPTIDE** [83856-13-7] (MCD) H_2N-Ile-Lys-Cys-Asn-Cys-Lys-Arg-His-Val-Ile-Lys-Pro-His-Ile-Cys-Arg-Lys-Ile-Cys-Gly-Lys-Asn-NH_2 **Ref.:** Taylor, J. W., et al., (1984), J. Biol. Chem., **259**, 13957; Bidard, J.N., et al., (1987), Brain Res., **418**, 235 MW 2587.6	100 µg	92.00
159024 **-20°C**	**MASTOPARAN X** (Ile-Asn-Trp-Lys-Gly-Ile-Ala-Ala-Met-Ala-Lys-Lys-Leu-NH_2) **Purity: 98%** Demonstrates similar action as mastoparan. **Ref.:** Higashijima, T., et.al., J. Biol. Chem., **265**, 14176 (1990). MW 1555.9	1 mg	143.30
196019 **-20°C**	**MATRIX METALLOPROTEINASE-1 SUBSTRATE** (MMP-1 Substrate; DNP-Pro-Leu-Ala-Leu-Trp-Ala-Arg; Fibroblast Collagenase Substrate) **Purity: ≥95%** Fluorogenic substrate for human fibroblast collagenase. Soluble in 0.1% aqueous TFA. K_m = 130 µM. Excitation max.: 280 nm; Emission max.: 360 nm. $C_{46}H_{65}N_{13}O_{12}$ MW MW 992.1	1 mg	52.50
196020 **-20°C**	**MATRIX METALLOPROTEINASES-2,7 SUBSTRATE** (MMP-2/MMP-7 Substrate; MCA) MCA-Pro-Leu-Gly-Leu-DPA-Ala-Arg-NH_2) **Purity: ≥98%** Sensitive fluorogenic substrate for MMPs. $C_{49}H_{68}N_{14}O_{15} \bullet C_2H_4O_2$ MW 1153.2	1 mg	294.00
196021 **-20°C**	**MATRIX METALLOPROTEINASES-2,9 SUBSTRATE** (MMP-2/MMP-9 Substrate; DNP-Pro-Leu-Gly-Met-Trp-Ser-Arg; Fibroblast and Neutrophil Gelatinase Substrate) **Purity: ≥95%** Fluorogenic substrate. $C_{44}H_{61}N_{13}O_{13}S$ MW 1012.1	1 mg	52.50
196018 **-20°C**	**MATRIX METALLOPROTEINASE INHIBITOR I** (MMP Inhibitor I; 4-Abz-Gly-Pro-D-Leu-D-Ala-NHOH) **Purity: ≥98%** Human matrix metalloproteinse inhibitor. $C_{23}H_{34}N_6O_6$ MW 490.6	1 mg 5 mg	30.00 120.00
153674 **0-5°C**	**MECA** [35788-27-3] An α_2-adenine agonist. $C_{11}H_{14}N_6O_4$ MW 294.3	5 mg 10 mg 25 mg	40.55 72.25 144.60

CATALOG NUMBER			U.S. $
153675 **RT**	**MECAMYLAMINE** [60-40-2] **Hydrochloride** Blocks action of nicotinic acid. $C_{11}H_{21}N \bullet HCl$ MW 203.8	1 mg 5 mg 10 mg	17.35 54.95 101.25
159183 **RT**	**MECLOFENAMIC ACID** [6385-02-0] (Meclofenamate sodium; 2-[(2,6-Dichloro-3-methylphenyl)-amino]benz oic acid) **Sodium Salt** **Purity: 99%** Inhibits 5-lipoxygenase and cyclooxygenase. **Ref.:** Columbo, M., et.al., Biochem. Pharmacol., **39**, 285 (1990). $C_{14}H_{10}Cl_2NO_2Na$ MW 318.1	1 g 5 g 10 g	14.50 48.00 89.00
102254 **0°C**	**MELATONIN** [73-31-4] (N-Acetyl-5-Methoxytryptamine) **Crystalline** A hormone of the pineal gland. $C_{13}H_{16}N_2O_2$ MW 232.3	100 mg 1 g 5 g 10 g	8.00 32.00 138.00 248.00
193596 **0-5°C**	**MELATONIN ELISA KIT** The Melatonin ELISA is a competitive enzyme immunoassay for the quantitative determination of melatonin in serum without extraction. For melatonin measurement in serum, the samples are treated enzymatically to free the antigen from its binding proteins. The assay procedure follows the basic principle of competitive ELISA whereby there is competition between a biotinylated and non-biotinylated antigen for a fixed number of antibody binding sites. The kit is a 12 x 8 well format. *FOR RESEARCH USE ONLY!*	1 each	595.00
193597 **0-5°C**	**MELATONIN SULFATE ELISA KIT** (6-Sulfatoxymelatonin ELISA) The 6-Sulfatoxymelatonin ELISA kit provides materials for the quantitative measurement of melatonin sulfate in urine. The assay procedure follows the basic principle of competitive ELISA: the competition between melatonin sulfate conjugated to horseradish peroxidase and melatonin sulfate in the sample for a fixed number of antibody binding sites. The kit is a 12 x 8 well format. *FOR RESEARCH USE ONLY!*	1 each	575.00
158952 **RT**	**MELENGESTROL ACETATE** [2919-66-6] (U-21240) **Purity: 99%** An antineoplastic agent. MW 396.5	250 mg 500 mg 1 g	65.25 123.80 237.35
102257 **0°C**	**MELITTIN** [37231-28-0] Lyophilized. **Purity: ~85%** Hemolytic principle of bee venom; **Activity:** One part hemolyzes 5,000 parts blood. MW 2846.5	1 mg 5 mg 10 mg	26.20 71.85 128.85
193681 **RT**	**MEMANTINE** [19982-08-2] (3,5-Dimethyladamantan-1-amine) **Hydrochloride** **Purity: ≥98%** An NMDA receptor antagonist and dopamine release stimulator. $C_{12}H_{21}N \bullet HCl$ MW 215.8	10 mg 50 mg	25.20 89.25

CATALOG NUMBER			U.S. $
193682 RT	**MESULERGINE** [64795-35-3] **Hydrochloride** A dopaminergic receptor agonist and 5-HT_{1C} serotonin receptor antagonist. $C_{18}H_{29}N_4O_2S$ • HCl MW 398.9	10 mg 50 mg	68.50 275.00
195310 RT	DL-**METANEPHRINE** [5001-33-2] (DL-m-O-Methylepinephrine) **Hydrochloride** **Crystalline** $C_{10}H_{15}NO_3$ • HCl MW 233.7	25 mg 100 mg 250 mg 500 mg 1 g	14.15 39.90 78.75 115.50 183.75
193593 0-5°C	**METANEPHRINE ELISA KIT** This metanephrine ELISA kit provides materials for the quantitative measurement of chemically derivatized metanephrine in urine. The assay procedure follows the basic principle of competitive ELISA whereby there is competition between a biotinylated and non-biotinylated antigen for a fixed number of antibody binding sites. The kit is a 12 x 8 well format. *FOR RESEARCH USE ONLY!*	1 each	595.00
193683 RT	**METERGOLINE PHENYLMETHYL ESTER** [17692-51-2] A serotonin antagonist at the 5-HT_1/5-HT_2 receptor. $C_{29}H_{29}N_3O_2$ MW 403.5	5 mg 25 mg 50 mg	16.55 49.60 90.40
100005 0°C	**METHACHOLINE CHLORIDE** [62-51-1] (Acetyl-β-methylcholine chloride) $C_8H_{18}ClNO_2$ MW 195.7	5 g 10 g	11.45 20.05
190231 0°C	**METHACHOLINE CHLORIDE** [62-51-1] (Acetyl-β-methylcholine chloride) **Crystalline** Cholinergic agonist $C_8H_{18}ClNO_2$ MW 195.7	5 g 10 g 25 g 100 g	17.75 28.10 55.90 183.45
158953 RT	**METHIOTHEPIN MALEATE** [19728-88-2] **Purity: 99%** Inhibitor of 5-HT release from brain structures whether electrical or potassium induced. Potent 5-HT autoreceptor antagonist and demonstrates activity as a 5-HT_{1C} antagonist. **Ref.:** 1. Pazos, A., et.al., Eur. J. Pharmacol., **106**, 539 (1985). 2. Ennis, C. and Cox, B., Neuropharmacology, **21**, 41 (1982). 3. Raiteri, M., et.al., J. Pharamcol. Exp. Ther., **237**, 644 (1986). 4. Rebec, G.V., et.al., Brain Res., **251**, 374 (1982).	100 mg 250 mg 500 mg	45.90 109.20 208.70
153664 RT	**METHOCTRAMINE** [104807-40-1] **Hydrochloride** $C_{38}H_{62}N_4O_2$ • 4HCl MW 728.8	1 mg 5 mg 10 mg	28.85 72.25 115.70
158955 RT	**8-METHOXYMETHYL-1-METHYL-3-(2-METHYLPROPYL)XANTHINE** (8-Methoxymethyl-IBMX) **Purity: 98%** Specifically inhibits Ca^{2+}-calmodulin-dependent phosphodiesterase. **Ref.:** 1. Wells, J.N. and Miller, J.R., Methods Enzymol., **159**, 489 (1988). 2. Ahn, H.S., et.al., Biochem. Pharmacol., **38**, 3331 (1989). MW 266.3	5 mg 25 mg	46.00 156.00

CATALOG NUMBER			U.S. $
159968 RT	**6-METHOXY-2-NAPHTHYLACETIC ACID** [23981-47-7] **Purity: 99%** Selectively inhibits PGH synthase-2 over PGH synthase-1. **Ref.:** Meade, E.A., et al., *J. Biol. Chem.*, **268**, 6610 (1993). MW 216.2	5 mg 10 mg 25 mg	80.25 145.65 315.30
151629 RT	**1-(2-METHOXYPHENYL) PIPERAZINE** [5464-78-8] (2-MPP) **Hydrochloride** Selective 5-HT_1 receptor agonist **Crystalline** **Purity: 98-99%** $C_{11}H_{16}N_2O$ • HCl MW 228.7	1 g 5 g	25.00 100.00
158956 0°C	**N-[2-(METHYLAMINO)ETHYL]-5-ISOQUINOLINESULFONAMIDE** [84478-11-5] (H-8) **Dihydrochloride** **Purity: 99%** Specifically inhibits PKA and PKG over PKC and MLCK. **Ref.:** 1. Hidaka, H., et.al., Biochemistry, **23**, 5036 (1984). 2. Hagiwara, M., et.al., Mol. Pharmacol., **31**, 523 (1987). $C_{12}H_{15}N_3O_2S$ • 2HCl MW 338.3	10 mg 25 mg 50 mg	68.75 157.65 286.65
159625 RT	**N^G-METHYL-D-ARGININE** [137694-75-8] **Acetate Salt** $C_7H_{16}N_4O_2$ • $C_2H_4O_2$ MW 248.3	5 mg 25 mg	38.00 150.00
155470 RT	**N^G-METHYL-L-ARGININE** [53308-83-1] **Acetate Salt** Endothelium-derived relaxing factor inhibitor **Ref.:** Sakuma, I., et al., Proc. Nat. Acad. Sci. USA, **85,** 8664 (1988). $C_7H_{16}N_4O_2$ • $C_2H_4O_2$ MW 248.3	5 mg 25 mg 100 mg	13.50 49.00 159.00
153672 0-5°C	**N-METHYL-D-ASPARTIC ACID** [6384-92-5] (NMDA) $C_5H_9NO_4$ MW 147.1	25 mg 80 mg 250 mg	25.00 55.00 105.00
153671 RT	**N-METHYL-β-CARBOLINE-3-CARBOXAMIDE** [78538-74-6] (FG-7142) Benzodiazipine inverse agonist $C_{13}H_{11}N_3O$ MW 225	10 mg 25 mg	18.40 43.35
	METHYL β-CARBOLINE-3-CARBOXYLATE *See*: β-Carboline-3-carboxylic acid methyl ester		
153669 0-5°C	**METHYL-6,7-DIMETHOXY-4-ETHYL-β-CARBOLINE-3-CARBOXYLATE** [82499-00-1] (DMCM) $C_{17}H_{18}N_2O_4$ MW 314.3	10 mg 25 mg	42.70 101.25
153658 0-5°C	**N-METHYLDOPAMINE** [62-32-8] **Hydrochloride** Dopamine agonist $C_9H_{13}NO_2$ • HCl MW 203.7	25 mg 50 mg 100 mg	22.40 36.15 72.25
195317 0°C	**α,β-METHYLENEADENOSINE-5′-TRIPHOSPHATE** [58337-46-5] (AMP-CPP; Adenosine 5′-[α,β-methylene]triphosphate dilithium hydrate) **Dilithium hydrate** **Purity: ~95%** $C_{11}H_{18}N_5O_{12}P_3$ MW 505.2	1 mg 5 mg	28.00 112.00

Neuroscience

CATALOG NUMBER			U.S. $
159969 RT	**R(-)-α-METHYLHISTAMINE Dihydrobromide** **Purity: 99%** Selective and potent agonist of histamine H_3. **Ref.:** 1. Arrang, J.M., et al., *Nature*, **327**, 117 (1987). 2. Hew, R.W.S., et al., *Brit. J. Pharmacol.*, **101**, 621 (1990). $C_6H_{11}N_3 \bullet 2HBr$ MW 287	5 mg 10 mg 25 mg	56.15 94.00 192.60
155578 0-5°C	**N-ω-METHYL-5-HYDROXYTRYPTAMINE** [1975-81-1] (N-ω-Methylserotonin) **Oxalate Salt** $C_{11}H_{14}N_2 \bullet C_2H_2O_4$ MW 280.3	25 mg 100 mg 500 mg	29.40 104.60 475.00
153621 -20-0°C	**α-METHYL-5-HYDROXYTRYPTAMINE** [304-52-9] (α-Methylserotonin maleate) A 5-HT_2 serotonin agonist. **Maleate Salt** $C_{11}H_{14}N_2O \bullet C_4H_4O_4$ MW 306.3	2 mg 5 mg 10 mg	50.60 115.70 224.10
193685 0-5°C	**5-(N-METHYL-N-ISOBUTYL)AMILORIDE** [96861-65-3] (MIA) Very potent Na^+/H^+ antiporter inhibitor. $C_{11}H_{18}N_7OCl$ MW 299.8	5 mg 25 mg	22.05 90.40
155590 RT	**S-METHYLISOTHIOUREA** [867-44-7] (2-Methyl-2-thiopseudourea) **Hemisulfate Salt** **Crystalline** A competitive inhibitor of inducible nitric oxide synthase (iNOS) at L-arginine binding sites. $C_2H_6N_2S \bullet 1/2H_2SO_4$ MW 139.2	100 g 500 g	13.60 46.70
158383 0-5°C	**METHYL OKADAATE** [78111-14-5] **Purity ≥ 98%** Serine/Threonine protein phosphatase inhibitor $C_{45}H_{70}O_{13}$ MW 819.04	50 µg 100 µg	118.95 212.85
159185 0°C	**METHYL-2-(PHENYLTHIO)ETHYL-1,4-DIHYDRO-2,4,6-TRIMETHYL-PYRIDINE-3,5-DICARBOXYLATE** (PCA-4248) **Purity: 98%** Inhibitor of [^{3}H]-platelet activating factor to platelets and PMNL receptors. Also blocks plate aggregation. **Ref.:** Ortega, M.P., et.al., J. Pharmacol. Exp. Ther., **255**, 28 (1990). MW 361.4	5 mg 10 mg	64.00 112.00
155653 0-5°C	**(5α,7α,8β)-(+)-N-METHYL-N-(7-[1-PYRROLIDINYL]-1-OXASPIRO[4.5]DEC-8-YL)-BENZENEACETAMIDE** [96744-75-1] (U-69,593) A kappa agonist **Ref.:** Gillan, M.G.C. and Kosterlitz, H., Br. J. Pharmac., **77,** 461 (1982). $C_{22}H_{32}N_2O_2$ MW 356.5	1 mg 10 mg	18.00 148.00
193686 RT	**METHYLSERGIDE** [129-49-7] **Maleate Salt** Serotonin receptor antagonist. $C_{21}H_{27}N_3O_2 \bullet C_4H_4O_4$ MW 469.5	1 mg 5 mg	52.90 213.90
	α-METHYLSEROTONIN MALEATE *See*: α-Methyl-5-hydroxytryptamine maleate		
	2-METHYLSEROTONIN MALEATE *See*: 2-Methyl-5-hydroxytryptamine maleate		

CATALOG NUMBER			U.S. $
152405 0-5°C	**METHYL [5-(2-THIENYL-CARBONYL)-1H-BENZ-IMIDAZOLE-2-YL]-CARBAMATE** [31430-18-9] (Nocodazole; R 17934) **Purity: 99%** A synthetic microtubule inhibitor shown to induce the disappearance of microtubules from neoplastic cells in vivo and mammalian cells in culture. $C_{14}H_{11}N_3O_3S$ MW 301.3	1 mg 5 mg 25 mg 50 mg	10.90 29.40 106.95 189.00
153663 -20-0°C	**2-METHYLTHIOADENOSINE TRIPHOSPHATE** [43170-89-4] **Tetrasodium Salt** $C_{11}H_{14}N_5Na_4O_{13}P_3S$ MW 641.2	2 mg 5 mg 10 mg	86.75 144.60 260.30
159073 -20°C	***bis*(METHYLTHIO)GLIOTOXIN** [74149-38-5] (FR-49175) **Purity: 99%** Blocks platelet and collagen induced aggregation. **Ref.:** 1. Okamoto, M., et.al., Chem. Pharm. Bull., **34**, 340 (1986). 2. Okamoto, M., et.al., ibid., **34**, 345 (1986). MW 356.5	1 mg 5 mg	65.00 290.00
159588 0-5°C	**8-METHYL-N-VANILLYLNONANAMIDE** [2566-32-7] (Dihydrocapsaicin) **Purity: ~90%** $C_{18}H_{29}NO_3$ MW 307.4	25 mg 100 mg	25.00 75.00
159843 0-5°C	**8-METHYL-N-VANILLYL-6-NONENAMIDE** [404-86-4] (Capsaicin) **Purity: ≈98%** Substantially free of dihydrocapsaicin. This is a purified form of the neurotoxic component of cayenne pepper. Stimulates excitatory afferent sensory neurons via divalent cation channel activation. **Ref.:** Holzer, Neuroscience, **24**, 739 (1988). $C_{18}H_{27}NO_3$ MW 305.4	25 mg 100 mg 500 mg	28.65 68.75 206.35
153559 RT	**METOCLOPRAMIDE** [364-62-5] **Hydrochloride** 5-HT_3 serotonin antagonist $C_{14}H_{22}ClN_3O_2 \bullet HCl$ MW 336.3	1 g 5 g	36.15 108.45
153617 RT	**METOLAZONE** [17560-51-9] Diuretic; anti-hypertensive $C_{16}H_{16}N_3O_3SCl$ MW 365.8	25 mg 50 mg 100 mg	10.90 14.45 26.10
190018 RT	**METOPROLOL TARTRATE** [56392-17-7] Crystalline powder A β-adrenergic compound. $(C_{15}H_{25}NO_3)_2 \bullet C_4H_6O_6$ MW 684.8	1 g 5 g 10 g	9.00 31.00 56.00
159971 -20°C	**MEVASTATIN** [73573-88-3] (Compactin) **Purity: 95%** HMG-CoA reductase inhibitor. $C_{23}H_{34}O_5$ MW 390.5	5 mg	54.00
151692 0°C	**MEZEREIN** [34807-41-5] (Daphnetoxin) Co-inducer of interferon $C_{38}H_{38}O_{10}$ MW 654.7	1 mg 5 mg	128.80 343.40
153619 0-5°C	**MIANSERIN** [21535-47-7] **Hydrochloride** Serotonin antagonist $C_{18}H_{20}N_2 \bullet HCl$ MW 300.8	25 mg 50 mg 100 mg	14.45 21.75 39.80

CATALOG NUMBER			U.S. $
158379 0-5°C	**MICROCYSTIN-LR** [101043-37-2] **Purity ≥ 98%** Heptapeptide ester hepatotoxin Equally potent in inhibition of protein phosphatases 1 and 2A (PP1 and PP2A); PP2B is less sensitive and PP2C is not inhibited up to 4 μM; useful for affinity purification of PP2A. Not cell permeable. **Ref:** 1. *J. Biol. Chem.*, (1988), **110**, 8557-8558. 2. *FEBS Lett.*, (1990), **264**, 187-192. 3. *J. Biol. Chem.*, (1990), **265**, 19401-19404. $C_{49}H_{74}N_{10}O_{12}$ MW 995.2	100 μg 500 μg	95.00 370.00
158962 -20-0°C	**MILRINONE** [78415-72-2] (1,6-Dihydro-2-methyl-6-oxo-3,4-bipyridine-5-carbonitrile) **Purity: 97%** Specifically inhibits cGMP-inhibited phosphodiesterase. Strong cardiotonic positive inotropic vasodilator. **Ref.:** 1. Harrison, S.A., et.al., Mol. Pharmacol., **29**, 506 (1986). 2. Ahn, S., et.al., Biochem. Pharmacol., **35**, 1113 (1986). 3. Alousi, A.A., et.al., J. Cardiovas. Pharmacol., **5**, 792 (1983). $C_{12}H_9N_3O$ MW 211.2	10 mg 25 mg	170.00 380.00
159973 RT	**L-MIMOSINE** [500-44-7] (β-[N-(3-Hydroxy-4-pyridone)-α-aminopropionic acid) **Purity: 99%** A rare amino acid from plants which reversibly blocks the G1 phase of the cell cycle. Deoxyhypusine hydroxylation inhibitor that subsequently inhibits eukaryote initiation factor 5-A. **Ref.:** Hanauske-Abel, H.M., et al., *Biochim. Biophys. Acta*, **1221**, 115 (1994). $C_8H_{10}N_2O_4$ MW 198.2	25 mg 100 mg 500 mg 1 g	10.00 18.75 75.00 138.00
155719 RT	**MINOXIDIL** [38304-91-5] (6-[1-Piperidinyl]pyrimidine-2,4-diamine 3 oxide) Stimulates ATP-activated potassium-ion channels. **Ref:** Gorecki, Anal. Profiles Drug Subst., **17**, 185 (1988). $C_9H_{15}N_5O$ MW 209.3	25 mg 100 mg 250 mg 500 mg	24.10 68.00 149.00 260.00
158963 RT	**MINOXIDIL SULFATE** (U-58838) **Purity: 98%** Specifically opens ATP-sensitive K^+ channels. Strong vascular smooth muscle relaxer. Also, an active metabolite of minoxidil. **Ref.:** 1. Winquist, R.J., et.al., J. Pharmacol. Exp. Ther., **248**, 149 (1989). 2. Meisheri, K., et.al., J. Pharmacol. Exp. Ther., **245**, 751 (1988). 3. Gadwood, R.C. and Fiedler, V.C., Annu. Rep. Med. Chem., **24**, 187 (1989). $C_9H_{15}N_5O \bullet SO_3$ MW 289.3	1 mg 5 mg	19.00 75.00
191240 0-5°C	**MITHRAMYCIN A** [18378-89-7] From *Streptomyces plicatus* $C_{52}H_{76}O_{24}$ MW 1085.2	1 mg 5 mg	55.00 235.05
193687 RT	**(+)-MK 801 MALEATE** [77086-22-7] (Dizocilpine) A very potent, selective non-competitive NMDA receptor antagonist. U.S.patent4,399,141(Merck&Co.,Inc.) $C_{16}H_{15}N \bullet C_4H_4O_4$ MW 337.4	5 mg 25 mg	22.00 88.00
151703 0°C	**MOLLUSCAN CARDIOEXCITATORY NEUROPEPTIDE** [64190-70-1] Phe-Met-Arg-Phe-NH_2 **Ref.:** Price, Science, 197, 670 (1977)	1 mg	19.50
159818 0-5°C	**MOLSIDOMINE** [25717-80-0] (N-(Ethoxycarbonyl)-3-(4-morpholinyl)sydnone imine; SIN-10) Precursor which is converted to the active metabolite SIN-1. $C_9H_{14}N_4O_4$ MW 242.2	500 mg 1 g 5 g	34.40 61.90 246.55
190241 0°C	**MONENSIN** [22373-78-0] **Sodium Salt** Antibiotic that functions as an ionophore by forming stable complexes with monovalent cations. **Ref.:** Gertenbach, P.G. and Popov, A.I., J. Am. Chem. Soc., **97**, 4738 (1975). $C_{36}H_{61}O_{11}Na$ MW 692.9	500 mg 1 g	34.00 59.50
159626 0°C	**MONENSIN METHYL ESTER** MW 684.9	10 mg 25 mg 100 mg	29.80 59.65 212.10
152956 -20-0°C	**MORPHICEPTIN** (β-Casomorphin [1-4] Amide; Tyr-Pro-Phe-Pro-NH_2) A highly preferential ligand for the μ-opiate (morphine) receptor. **Ref:** Chang, K.J., et al., Science, **212**, 75 (1981).	1 mg 5 mg 10 mg	15.85 40.55 65.85
	3-MORPHOLINOSYDNONIMINE HYDROCHLORIDE *See*: SIN-1		
102433 RT	**MUREXIDE** [3051-09-0] (Ammonium purpurate) Reddish-brown crystals. Indicator for calcium determination. $C_8H_8N_6O_6$ MW 284.2	1 g 5 g 25 g	6.60 12.25 41.05
195336 0°C	**MUSCIMOL** [2763-96-4] (3-Hydroxy-5-aminomethylisoxazole) **Crystalline** Structural analog of γ-amino butyric acid. Functions as a GABA-agonist: a positive analog of the natural transmitter, which can activate GABA receptors in the brain. $C_4H_6N_2O_2$ MW 114.1	1 mg 5 mg 10 mg 25 mg	17.05 53.00 84.00 168.00
151720 0-5°C	**MUSCIMOL** **Hydrobromide** GABA agonist, water soluble $C_4H_6N_2O_2 \bullet HBr$ MW 275.9	10 mg 25 mg 100 mg	90.00 180.00 650.00
159186 RT	**MUSCONE** [541-91-3] **Purity: 99%** Cytochrome P^{450} inducer in rats. **Ref.:** 1. Peng, R., et.al., Biochem. Pharmacol., **35**, 1391 (1986). 2. Tanaka, E., et.al., ibid., **41**, 472 (1991). $C_{16}H_{30}O$ MW 238.4	100 mg 250 mg 500 mg	80.25 177.70 332.55
159627 0°C	**MYELIN BASIC PROTEIN, Fragment 4-14** [126768-94-3] Gln-Lys-Arg-Pro-Ser-Gln-Arg-Ser-Lys-Tyr-Leu Reported to be the most specific substrate for protein kinase C. **Ref.:** Yasuda, I., et al., *Biochem. Biophys. Res. Comm.*, **166**, 1220 (1990). MW 1390.6	1 mg	87.00
159628 0°C	**MYELIN BASIC PROTEIN, Fragment 104-118** Gly-Lys-Gly-Arg-Gly-Leu-Ser-Leu-Ser-Arg-Phe-Ser-Trp-Gly-Ala MW 1578.8	1 mg	181.10

CATALOG NUMBER			U.S. $
159975 0°C	**Des[Gly^{77},His^{78}]-MYELIN BASIC PROTEIN, Fragment 68-84** [98474-59-0] Tyr-Gly-Ser-Leu-Pro-Gln-Lys-Ala-Gln-Arg-Pro -Gln-Asp-Glu-Asn **Purity: 95%** **Species:** Bovine **Ref.:** Mannie, M., et al., *Proc. Natl. Acad. Sci. USA*, **82**, 5515 (1985). MW 1730.9	1 mg	177.70
155746 0°C	**MYELIN BASIC PROTEIN, Fragment 68-82** [98474-59-0] (des[Gly^{77},His^{78}]-Ser^{75,80}-Myelin Basic Protein Bovine Fragment 68-84) **Guinea Pig** (Tyr-Gly-Ser-Leu-Pro-Gln-Lys-Ser-Gln-Arg-S er-Gln-Asp-Glu-Asn) **Ref.:** Mannie, M., et al., *Proc. Nat. Acad. Sci. USA*, **82**, 5515 (1985). MW 1736.8	0.1 mg 0.5 mg 1 mg	36.40 121.25 201.90
154586 0-5°C	**MYOSIN KINASE INHIBITING PEPTIDE** Lys-Lys-Arg-Ala-Ala-Arg-Ala-Thr-Ser-NH_2 **Ref.:** Pearson, R.B., et al., (1986), *J. Biol. Chem.*, **261**, 25 (1986). MW 988.2	1 mg 5 mg	77.95 361.50
159631 -20-0°C	**MYOSIN LIGHT CHAIN KINASE INHIBITOR** Lys-Arg-Arg-Trp-Lys-Lys-Asn-Phe-Ile-Ala-Val MW 1444.9	1 mg	131.90
159632 -20-0°C	**MYOSIN LIGHT CHAIN KINASE SUBSTRATE** Skeletal muscle Ala-Lys-Arg-Pro-Gln-Arg-Ala-Thr-Ser-Asn-Va l-Phe-Ser MW 1460.80	1 mg	166.25
159633 -20-0°C	**MYOSIN LIGHT CHAIN KINASE SUBSTRATE** Smooth muscle Lys-Lys-Arg-Ala-Ala-Arg-Ala-Thr-Ser-Asn-Val -Phe-Ala MW 1418.8	1 mg	131.90
155765 0-5°C	**MYXOTHIAZOL** [76706-55-3] **Purity: 95%** **From Myxobacterium** (*Myxococcus fulvus*) Reported to inhibit cytochrome b-c, in the mitochrondria responsible for the respiratory chain. **Ref.:** Thierbach, G. and Reichenbach, H., Biochim. Biophys. Acta. **638,** 282 (1981). $C_{29}H_{33}N_3O_3S_2$ MW 487.7	1 mg 5 mg	35.70 184.60

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193688 RT	**NAFTOPIDIL** [57149-07-2] **Dihydrochloride** An α_1-adrenoceptor antagonist. $C_{24}H_{28}N_2O_3$ • 2HCl MW 465.4	10 mg 50 mg	29.75 119.05
151723 RT	**NALBUPHINE** (N-Cyclobutylmethyl-14-hydroxy-dihydromorp hine) **Hydrochloride** Analgesic and narcotic antagonist $C_{21}H_{27}NO_4$ • HCl MW 393.9	50 mg 250 mg 1 g	45.90 180.55 382.85
190246 RT	**NALIDIXIC ACID** [389-08-2] (1-Ethyl-1,4-dihydro-7-methyl-4-oxo-1,8-naph thyridine-3-carboxylic acid) **Free Acid** **Crystalline** DNA Polymerase Inhibitor. $C_{12}H_{12}N_2O_3$ MW 232.2	5 g 25 g 100 g	10.20 31.80 116.15
151724 0°C	**NALIDIXIC ACID** [3374-05-8] (1-Ethyl-1,4-dihydro-7-methyl-4-oxo-1,8-naph thyridine-3-carboxylic acid) **Sodium Salt** **Crystalline** $C_{12}H_{11}N_2O_3Na$ MW 254.2	1 g 5 g 25 g 100 g	7.40 22.50 78.25 216.00
153613 0-5°C	**NALOXONAZINE** [82824-01-9] (*Bis* [5-α-4,5-Epoxy-3,14-dihydroxy-17-(2-propen yl) morphinan-6-ylidene] hydrazine) Opioid antagonist at μ_1 receptors. $C_{38}H_{42}N_4O_6$ MW 650.8	2 mg 5 mg 10 mg	25.35 57.80 108.45
190245 0-5°C	**NALOXONE** [357-08-4] **Hydrochloride** **Crystalline** A specific opiate antagonist. $C_{19}H_{21}NO_4$ • HCl MW 363.8	25 mg 100 mg 250 mg 1 g	12.40 26.80 51.60 139.60
151725 RT	**NALTREXONE** [16676-29-2] (N-Cyclopropylmethyl-14-hydroxydihydromor phinone) **Hydrochloride** Narcotic antagonist, congener of Naloxone, $C_{20}H_{23}NO_4$ • HCl MW 377.9	250 mg	89.00
193690 -20°C	**NALTRINDOLE** [111469-81-9] (NTI) **Hydrochloride** Very selective non-peptide δ-opioid receptor antagonist. $C_{26}H_{26}N_2O_3$ • HCl MW 450.6	1 mg 5 mg 10 mg	17.65 68.35 123.50
158964 RT	**NAN-190** [115338-32-4] **Hydrobromide** **Purity: 98%** 5-HT_{1A} antagonist. **Ref.:** 1. Glennon, R.A., et.al., J. Med. Chem., **31**, 1968 (1988). 2. Glennon, R.A., et.al., Eur. J. Pharmacol., **154**, 339 (1988). $C_{23}H_{27}N_3O_3$ • HBr MW 474.4	50 mg 100 mg 250 mg	73.35 139.90 333.70
102409 RT	**NAPHTHORESORCINOL** [132-86-5] (1,3-Dihydroxynaphthalene; 1,3-Naphthalenediol) Light brown crystals. **Purity: ~95%** Potent inhibitor of prostaglandin synthetase. Reagent for determination of serine and glucuronic acid. $C_{10}H_8O_2$ MW 160.2	1 g 5 g 10 g	20.00 91.00 173.40
193692 RT	**1-NAPHTHOXYLACTIC ACID** A metabolite of propranolol. $C_{13}H_{12}O_4$ MW 232.2	10 mg 50 mg	27.55 110.25
153612 0-5°C	**1-(1-NAPHTHYL)PIPERAZINE** [57536-86-4] **Hydrochloride** Serotonin 5-HT_1 agonist; 5-HT_2 antagonist. $C_{14}H_{16}N_2$ • HCl MW 248.8	25 mg 50 mg 100 mg	43.35 79.55 151.90
190247 RT	**NAPROXEN** [22204-53-1] (S(+)-6-methoxy-α-methyl-2-naphthaleneace tic acid) [S(+)-2-(6-Methoxy-2-naphthyl)propionic acid] Pharmacological agent that reportedly may show activity through ability to inhibit prostaglandin biosynthesis. **Ref.:** Tomlinson, et al., Biochem. Biophys. Res. Commun., **46**, 552 (1972). $C_{14}H_{14}O_3$ MW 230.3	1 g 5 g 25 g 50 g	6.60 21.50 77.00 127.75

Neuroscience

CATALOG NUMBER			U.S. $
195945 **RT**	**NBQX** [118876-58-7] (FG 9202; 6-Nitro-7-sulphamoylbenzo[f]quinoxaline-2,3-dione; 2,3-Dihydroxy-6-nitro-7-sulphamoylbenzo[f]quinoxaline) **Purity: ≥95%** Selective and potent AMPA/Kainate receptor antagonist. Acts as a neuroprotectant. $C_{12}H_8N_4O_6S$ MW 336.3	1 mg 5 mg	33.60 131.25
158966 **0-5°C**	**NEAMINE** [3947-65-7] (U-5214) **Purity: 97%** Increases phosphatidylinositol 4-phosphate kinase activity specifically over PI kinase activity. It may increase permeability in PI-containing membranes. **Ref.:** 1. Quist, E., et.al., Arch. Biochem. Biophys., **271**, 21 (1989). 2. Au, S., et.al., Biochem. Biophys. Acta., **902**, 80 (1987). $C_{12}H_{26}N_4O_6$ MW 322.4	5 mg 10 mg 25 mg 50 mg	20.60 39.00 93.15 168.00
100541 **RT**	**NEOMYCIN SULFATE** [1405-10-3] Minimum 630 µg Neomycin/mg White powder. **Approx. 90-95%** Neomycin B. Antibiotic, also used in tissue culture studies. Can act as an inhibitor of protein biosynthesis. $C_{23}H_{46}N_6O_{13} \bullet 3H_2SO_4$ MW 908.9	1 g 5 g 10 g 25 g 100 g	6.50 8.55 10.15 20.35 70.55
194533 **RT**	**NEOMYCIN SULFATE** [1405-10-3] **Cell Culture Reagent** Minimum 630 µg Neomycin/mg White powder. **Approx. 90-95%** Neomycin B. Antibiotic Acts as an inhibitor of protein biosynthesis. $C_{23}H_{46}N_6O_{13} \bullet 3H_2SO_4$ MW 908.9	1 g 5 g 10 g 25 g 100 g	8.80 11.00 13.75 24.25 87.10
153611 **0-5°C**	**NEOPTERIN** [2009-64-5] D(+)-6-(*erythro*-1,2,3-Trihydroxypropyl) pterin] $C_9H_{11}N_5O_4$ MW 253.2	10 mg 15 mg 25 mg	38.35 54.95 86.75
102434 **0-5°C**	**NEOPYRITHIAMINE** [534-64-5] (Pyrithiamine) **Hydrobromide** Thiamine Antagonist **Purity: ~95%** Yellow to off-white crystals. $C_{14}H_{18}N_4O \bullet 2HBr$ MW 420.1	1 mg 5 mg 10 mg	30.20 140.80 268.20
153553 **RT**	**NEOSTIGMINE BROMIDE** [114-80-7] [3-[[(Dimethylamino)carbonyl]oxy]-N,N,N-trimethylbenzenaminium bromide] Inhibitor of acetylchloinesterase $C_{12}H_{19}BrN_2O_2$ MW 303.2	250 mg 1 g	10.25 15.25
155816 **0°C**	**NEOSTIGMINE METHYL SULFATE** [51-60-5] [3-[([Dimethylamino]carbonyl)-oxy]-N,N,N-trimethylbenzaminium methyl sulfate] **Crystalline** $C_{13}H_{22}N_2O_6S$ MW 334.4	1 g 5 g 10 g 25 g	20.50 62.20 103.20 205.50

CATALOG NUMBER			U.S. $
151739 **-20-0°C**	**NEUROPEPTIDE Y** [82785-45-3] (NPY; Tyr-Pro-Ser-Lys-Pro-Asp-Asn-Pro-Gly-Glu-Asp-Ala-Pro-Ala-Glu-Asp-Leu-Ala-Arg-Tyr-Tyr-Ser-Ala-Leu-Arg-His-Tyr-Ile-Asn-Leu-Ile-Thr-Arg-Gln-Arg-Tyr-NH_2) **Source/Species:** Porcine **Ref:** Tatemoto, K., et al., Proc. Natl. Acad. Sci. (USA), **79**, 5485 (1982). MW 4253.7	0.5 mg 1 mg	242.70 438.15
191468 **-20-0°C**	**NEUROPEPTIDE Y** [90880-35-6] (NPY; Tyr-Pro-Ser-Lys-Pro-Asp-Asn-Pro-Gly-Glu-Asp-Ala-Pro-Ala-Glu-Asp-Met-Ala-Arg-Tyr-Tyr-Ser-Ala-Leu-Arg-His-Tyr-Ile-Asn-Leu-Ile-Thr-Arg-Gln-Arg-Tyr-NH_2) **Source/Species:** Human MW 4271.7	500 µg 1 mg	240.85 435.05
154449 **0-5°C**	**NEUROPEPTIDE Y, Fragment 13-36** [113662-54-7] H_2N-Pro-Ala-Glu-Asp-Leu-Ala-Arg-Tyr-Tyr-Ser-Ala-Leu-Arg-His-Tyr-Ile-Asn-Leu-Ile-Thr-Arg-Gln-Arg-Tyr- NH_2 **Source/Species:** Porcine **Ref.:** Walker, M.W. and Miller, R.J., (1988), Mol. Pharm., **34**, 779 MW 2982.7	500 µg 1 mg	150.95 276.10
193951 **-20°C**	**NEUROTROPHIN 3** (NT-3) **Human, Recombinant** This neurotrophin promotes neuronal survival and growth. **Ref.:** Mainsonpierre, et al., Science, **247**, 1447 (1990). MW 28 kDa	1 µg	209.45
193952 **-20°C**	**NEUROTROPHIN 3** (NT-3) **Human, Recombinant** Produced in *E. coli* **Purity: ≥95%** A neurotrophin that promotes neuronal growth. MW ~28 kDa	5 µg	396.90
193954 **-20°C**	**NEUROTROPHIN 4** (NT-4) **Human, Recombinant** Produced in *E. coli* **Purity: ≥95%** A neurotrophin that promotes neuronal growth. MW ~28 kDa	5 µg	396.90
191508 **0°C**	**NIALAMIDE** [51-12-7] (N-isonicotinoyl-N′ [β-(N-benzyl-carboxamido) ethyl] hydrazine; N-Benzyl-β-[isonicotinyl-hydrazine] propionamide) **Crystalline** **Purity: ~95%** Monoamine Oxidase inhibitor $C_{16}H_{18}N_4O_2$ MW 298.3	250 mg 500 mg	44.45 80.10
190244 **0-5°C**	**NICARDIPINE** [55985-32-5] (1,4-Dihydro-2,6-dimethyl-4-[3-nitrophenyl]methyl-2-[methyl-(phenyl-methl)amino]-3,5-pyridinedicarboxylic acid ethyl ester) **Hydrochloride** Cerebral and coary vasodilator with calcium blocking activity. Structurally related to Nifedipine. $C_{26}H_{29}N_3O_6 \bullet HCl$ MW 516	1 g 5 g 10 g	35.80 140.60 253.20

CATALOG NUMBER			U.S. $
155824 0-5°C	**NICERGOLINE** [27848-84-6] (5-Bromonicotinic acid 10-methoxy-1,6-dimethylergoline-8-methano l ester) **Free Acid** Purity: ~98% An α-adrenergic $C_{24}H_{26}BrN_3O_3 \bullet C_4H_4O_4$ MW 600.4	1 mg 5 mg 25 mg 100 mg	9.50 13.10 44.10 136.50
	NICORANDIL ANALOG *See*: N-[2-(Acetoxy)ethyl]-3-pyridinecarboxamide		
190671 RT	**(-)-NICOTINE** [54-11-5] (L-1-Methyl-2-[3-pyridyl]pyrrolidine) **Free Base** **Purity: 98-100%** Clear light yellow liquid $C_{10}H_{14}N_2$ MW 162.2	5 ml 25 ml 100 ml	12.20 41.20 83.50
155830 RT	**(±)-NICOTINE** [22083-74-5] $C_{10}H_{14}N_2$ MW 162.2	100 mg 500 mg	38.55 114.70
155829 0-5°C	**(+)-NICOTINE** [68935-27-3] **(+)-Di-p-toluoyltartrate Salt** $C_{10}H_{14}N_2 \bullet C_{20}H_{18}O_8$ MW 548.6	50 mg 250 mg	33.45 111.35
153554 RT	**(-)-NICOTINE** [65-31-6] [(S)-3-(1-Methyl-2-pyrrolindinyl)pyridine] **Tartrate Salt** $C_{10}H_{14}N_2 \bullet 2C_4H_6O_6$ MW 462.4	250 mg 1 g	10.90 21.75
151743 0-5°C	**NIFEDIPINE** [21829-25-4] [1,4-Dihydro-2,6-dimethyl-4-(2-nitrophenyl)-3,5-pyridine-dicarboxylic acid dimethyl ester] **Purity: 95%** Yellow crystalline powder A calcium-channel blocker. $C_{17}H_{18}N_2O_6$ MW 346.3	1 g 5 g 10 g 25 g	12.45 34.35 52.75 93.85
195345 0-5°C	**NIGERICIN** [28380-24-7] Mixture of sodium and potassium salts **Purity: ~95%** A polyether antibiotic that affects ion transport and ATPase activity in mitochondria. **Ref.:** Sze, H., Proc. Nat. Acad. Sci. U.S.A., **77**, 5904 (1980). $C_{40}H_{67}O_{11}Na$ MW 747	1 mg 5 mg 10 mg	40.15 176.40 420.20
159802 0-5°C	**(±)-NIGULDIPINE** [113317-61-6] **Hydrochloride** Very powerful α_{1A}-adrenergic inhibitor. $C_{36}H_{39}N_3O_6 \bullet HCl$ MW 646.2	1 mg 5 mg 25 mg	11.45 32.05 128.40
159803 RT	**NIMODIPINE** [66085-59-4] Potent calcium channel antagonist. **Ref.:** Kappelle, et al., Brit. J. Pharm., **111**, 887 (1994). $C_{21}H_{26}N_2O_7$ MW 418.4	10 mg 25 mg 100 mg	13.75 27.50 110.10
193694 RT	**NISOXETINE** [57754-86-6] **Hydrochloride** A selective norepinephrine uptake inhibitor. $C_{17}H_{21}NO_2 \bullet HCl$ MW 307.8	5 mg 25 mg	47.40 189.65
152419 0°C	**NITR 5** A photosensitive calcium chelator. Useful in a variety of systems where short pulses of rapidly released calcium may be used to probe associated physiological responses. **Ref.:** 1. Tsien, R. and Zucker, R.S., Biochem. J., **50**, 843 (1986). 2. Gurney, A.M., Tsien, R.Y., and Lester, H.A., Proc. Natl. Acad. Sci. USA, **84**, 3496 (1987). $C_{31}H_{31}N_3O_{15}$ MW 685.6	1 mg 5 mg	67.60 308.45
152420 0°C	**NITR 7** A photolabile calcium chelator. NITR 7 binds calcium approx. 3 times more tightly than NITR 5, but also releases it with a higher time constant (1.8 milliseconds vs. 300 microseconds). **Ref.:** Gurney, A.M., Tsien, R.Y., Lester, H.A., Proc. Natl. Acad. Sci. USA, **84**, 3496 (1987). $C_{34}H_{35}N_3O_{15}$ MW 725.7	1 mg 5 mg	67.60 308.45
159789 RT	**NITRENDIPINE** [39562-70-4] An L-type calcium channel blocker. $C_{18}H_{20}N_2O_6$ MW 360.4	5 mg 10 mg 50 mg	14.85 26.35 105.50
102503 RT	**N-ω-NITRO-L-ARGININE** [2149-70-4] **Crystalline** $C_6H_{13}N_5O_4$ MW 219.2	1 g 5 g 10 g	11.25 44.05 79.10
155846 0°C	**N-ω-NITRO-L-ARGININE METHYL ESTER** [51298-62-5] **Hydrochloride** **Crystalline** $C_7H_{15}N_5O_4 \bullet HCl$ MW 269.7	5 g 10 g 25 g	34.70 61.85 142.00
155872 0-5°C	**S-(p-NITROBENZYL)-6-THIOGUANOSINE** [13153-27-0] (S-(4-Nitrobenzyl)-6-thioguanosine; 2-Amino-6-[(4-nitrobenzyl)thio]-9-β-D-ribofuranosylpurine; NBTGR) Strong inhibitor for the transport of nucleosides. **Ref.:** 1. Can.J.Biochem., **49**, 271 (1971). 2. Ann. N.Y.Acad.Sci., **255**, 402 (1975). Yellow powder. $C_{17}H_{18}N_6O_6S$ MW 434.4	10 mg 25 mg 100 mg	14.05 31.00 112.00
155873 0°C	**S-(p-NITROBENZYL)-6-THIOINOSINE** [38048-32-7] (S-(4-Nitrobenzyl)-6-thioinosine; 6-[(4-nitrobenzyl)thio]-9-β-D-ribofuranosylpuri ne; NBMPR) Useful tool in cancer research as a very strong inhibitor for the transport of nucleosides. **Ref.:** Cancer Res., **39**, 1245 (1979). **Crystalline** $C_{17}H_{17}N_5O_6S$ MW 419.4	25 mg 100 mg 250 mg	35.80 120.40 263.70
159790 -20°C	**7-NITROINDAZOLE** [2942-42-9] **Purity: ≥97%** Inhibitor of nitric oxide synthase. **Ref.:** Moore, et al., Brit. J. Pharm., **110**, 219 (1993). $C_7H_5N_3O_2$ MW 163.1	1 mg 5 mg 25 mg	8.40 19.95 63.00
193697 -20°C	**7-NITROINDAZOLE** **Monosodium Salt** **Purity: ≥95%** Slightly water soluble salt of 7-nitroindazole, a selective inhibitor of nitric oxide synthase (NOS). $C_7H_4N_3O_2Na$ MW 185.1	1 mg 5 mg 25 mg	10.50 35.70 141.75
158967 RT	**5-NITRO-2-(3-PHENYLPROPYLAMINO)-BENZOIC ACID** [107254-86-4] **Purity: 98%** Cyclooxygenase inhibitor and potent chloride channel blocker. **Ref.:** 1. Diener, M. and Rummel, W., Acta Physiol. Scand., **137**, 215 (1989). 2. Wangemann, P., et.al., Pflugers Arch., **407**, s128 (1986). 3. Breuer, W., et.al., Biochem. Biophys. Res. Commun., **163**, 398 (1989). $C_{16}H_{16}N_2O_4$ MW 300.3	10 mg 25 mg 50 mg	57.35 131.90 252.25

CATALOG NUMBER			U.S. $
155923 0-5°C	**3-NITROPROPIONIC ACID** [504-88-1] An inhibitor of succinic dehydrogenase and a neurotoxin shown to cause brain lesions resembling those of Huntington's Disease. May produce a yellow solution in alcohol. $C_3H_5NO_4$ MW 119.1	5 g	166.10
158968 RT	**6-NITROQUIPAZINE MALEATE** **Purity: 98%** 5-HT uptake inhibitor. **Ref.:** 1. Hashimoto and Goromaru, Eur. J. Pharmacol., **180**, 273 (1990). 2. Hashimoto and Goromaru, Biochem. Pharmacol., **41**, 1679 (1991). $C_{13}H_{14}N_4O_2 \bullet C_4H_4O_4$ MW 374.3	5 mg 20 mg	75.00 261.00
159819 0°C	**S-NITROSO-L-GLUTATHIONE** [57564-91-7] (GSNO) A carrier of nitric oxide (NO), smooth muscle relaxant and inhibitor of platelet activation. **Ref.:** 1. Gibson, A., et al., Br. J. Pharmacol., **107**, 715 (1992). 2. Radomski, M.W., et al., Br. J. Pharmacol., **107**, 745 (1992). $C_{10}H_{16}N_4O_7S$ MW 336.3	5 mg 10 mg 25 mg	28.65 48.60 65.50
159820 -20°C	**NOC-5** (1-Hydroxy-2-oxo-3-(3-aminopropyl)-3-isopropyl-1-triazene) **Crystalline** A nitric oxide (NO) donor. Half-life time of NO release at 22 °C and pH 7.4 in 0.1 M phosphate buffer is 93.0 minutes. **Ref.:** 1. Hrabie, J.A., et al., J. Org. Chem., **58**, 1472 (1993). 2. Maragos, C.M., et al., Cancer Res., **53**, 564 (1993). $C_6H_{16}N_4O_2$ MW 176.2	1 mg 5 mg 10 mg	28.65 126.10 229.30
159821 -20°C	**NOC-7** (1-Hydroxy-2-oxo-3-(N-methylaminopropyl)-3-methyl-1-triazene) **Crystalline** A nitric oxide (NO) donor. Half-life time of NO release at 22 °C and pH 7.4 in 0.1 M phosphate buffer is 10.1 minutes. **Ref.:** 1. Hrabie, J.A., et al., J. Org. Chem., **58**, 1472 (1993). 2. Maragos, C.M., et al., Cancer Res., **53**, 564 (1993). $C_5H_{14}N_4O_2$ MW 162.2	1 mg 5 mg 10 mg	28.65 126.10 229.30
159822 -20°C	**NOC-9** [146724-86-9] (MAHMA-NONOate; 1-Hydroxy-2-oxo-3-(N-methyl-6-aminohexyl)-3-methyl-1-triazene) **Crystalline** **Purity: ≥98%** A nitric oxide (NO) donor. Half-life time of NO release at 22 °C and pH 7.4 in 0.1 M phosphate buffer is 2.7 minutes. **Ref.:** 1. Hrabie, J.A., et al., J. Org. Chem., **58**, 1472 (1993). 2. Maragos, C.M., et al., Cancer Res., **53**, 564 (1993). $C_8H_{20}N_4O_2$ MW 204.3	5 mg 10 mg 25 mg	55.00 97.45 194.95
159823 -20°C	**NOC-12** (1-Hydroxy-2-oxo-3-(N-ethyl-2-aminoethyl)-3-ethyl-1-triazene) **Crystalline** A nitric oxide (NO) donor. Half-life time of NO release at 22 °C and pH 7.4 in 0.1 M phosphate buffer is 327 minutes. **Ref.:** 1. Hrabie, J.A., et al., J. Org. Chem., **58**, 1472 (1993). 2. Maragos, C.M., et al., Cancer Res., **53**, 564 (1993). $C_6H_{16}N_4O_2$ MW 176.2	1 mg 5 mg 10 mg	28.65 126.10 229.30
159824 -20°C	**NOC-15** [146672-58-4] (PAPA NONOate; 1-Hydroxy-2-oxo-3-(3-aminopropyl)-3-propyl-1-triazene) **Crystalline** **Purity: ≥98%** A nitric oxide (NO) donor. Half-life time of NO release at 22 °C and pH 7.4 in 0.1 M phosphate buffer is 76.6 minutes. **Ref.:** 1. Hrabie, J.A., et al., J. Org. Chem., **58**, 1472 (1993). 2. Maragos, C.M., et al., Cancer Res., **53**, 564 (1993). $C_6H_{16}N_4O_2$ MW 176.2	5 mg 10 mg 25 mg	36.75 50.40 121.50
159825 -20°C	**NOC-18** [146724-94-9] (Z-1-[N-(2-Aminoethyl)-N-(2-ammonioethyl)amino]diazen-1-ium-1,2-diolate; 1-Hydroxy-2-oxo-3,3-bis(3-aminoethyl)-1-triazene) **Crystalline** A nitric oxide (NO) donor. Half-life time of NO release at 22°C and pH 7.4 in 0.1 M phosphate buffer is > 500 minutes. **Ref.:** 1. Hrabie, J.A., et al., J. Org. Chem., **58**, 1472 (1993). 2. Maragos, C.M., et al., Cancer Res., **53**, 564 (1993). $C_4H_{13}N_5O_2$ MW 163.2	1 mg 5 mg 10 mg 25 mg	15.00 55.00 97.45 194.95
	NOCODAZOLE *See*: Methyl[5-(2-Thienylcarbonyl)-1H-Benzimidazol-2-yl]Carbamate		
158380 0-5°C	**NODULARIN** [118399-22-7] **Purity ≥ 98%** Potent in the inhibition of protein phosphatases 1 and 2A (PP1 and PP2A) Useful for affinity purification of PP2A Similar to Microcystin-LR (ICN Cat. No. 158379), but with increased water solubility. **Ref:** 1. *J. Cancer Res. Clin. Oncol.*, **116**, 609-614 (1990). $C_{41}H_{60}N_8O_{10}$ MW 825	500 µg	298.10
193699 RT	**NOMIFENSINE** [32795-47-4] **Maleate Salt** A dopamine uptake inhibitor. $C_{16}H_{18}N_2 \bullet C_4H_4O_4$ MW 354.4	10 mg 25 mg 100 mg	16.55 28.65 104.20
159826 -20°C	**NOR-1** A nitric oxide (NO) donor. Half-life time of NO release at 37 °C and pH 7.4 in 0.1 M PBS is 1.7 minutes. **Ref.:** Kita, Y., et al., Eur. J. Pharmacol., **257**, 123 (1994). $C_8H_{13}N_3O_5$ MW 231.2	1 mg 5 mg 10 mg	28.65 126.10 229.30
159827 -20°C	**NOR-2** A nitric oxide (NO) donor. Half-life time of NO release at 37 °C and pH 7.4 in 0.1 M PBS is 28 minutes. **Ref.:** Kita, Y., et al., Eur. J. Pharmacol., **257**, 123 (1994). $C_7H_{11}N_3O_4$ MW 201.2	1 mg 5 mg 10 mg	28.65 126.10 229.30
159828 -20°C	**NOR-3** (FK409; (±)-E-Ethyl-2-[(E)-hydroxyimino]-5-nitro-3-hexeneamide) A nitric oxide (NO) donor. Half-life time of NO release at 37 °C and pH 7.4 in 0.1 M PBS is 30 minutes. **Ref.:** Kita, Y., et al., Eur. J. Pharmacol., **257**, 123 (1994). $C_8H_{13}N_3O_4$ MW 215.2	1 mg 5 mg 10 mg	19.95 78.75 115.50

CATALOG NUMBER			U.S. $
159829 -20°C	**NOR-4** A nitric oxide (NO) donor. Half-life time of NO release at 37 °C and pH 7.4 in 0.1 M PBS is 60 minutes. **Ref.:** Kita, Y., et al., Eur. J. Pharmacol., **257**, 123 (1994). $C_{14}H_{18}N_4O_4$ MW 306.3	1 mg 5 mg 10 mg	28.65 126.10 229.30
193594 0-5°C	**NORADRENALINE ELISA KIT** This noradrenaline ELISA kit provides materials for the quantitative measurement of chemically derivatized noradrenaline in urine. The assay procedure follows the basic principle of competitive ELISA whereby there is competition between a biotinylated and non-biotinylated antigen for a fixed number of antibody binding sites. The kit is a 12 x 8 well format. *FOR RESEARCH USE ONLY!*	1 each	583.00
155944 RT	**NORDIHYDROGUAIARETIC ACID** [500-38-9] (4,4′-[2,3-Dimethyl-1,4-butanediyl]-bis[1,2-benzenediol) Tan Crystals. Inhibitor of lipoxygenases $C_{18}H_{22}O_4$ MW 302.4	500 mg 1 g 5 g	24.15 41.10 167.80
158970 RT	**NORFENTANYL** **Purity: 99%** Urinary metabolite of fentanyl. **Ref.:** Hammargren, W.R. and Henderson, G.L., J. Anal. Toxicol., **12**, 183 (1988). MW 232.3	1 mg 5 mg 10 mg	65.60 286.65 544.65
105174 RT	**DL-NORMETANEPHRINE** [1011-74-1] (DL-α-[Aminomethyl]-4-hydroxy-3-methoxybenzenemethanol) **Hydrochloride** **Crystalline** **Purity: ~98%** $C_9H_{13}NO_3 \bullet HCl$ MW 219.7	100 mg 250 mg 500 mg 1 g 5 g	12.50 30.00 58.10 115.70 566.55
193595 0-5°C	**NORMETANEPHRINE ELISA KIT** This normetanephrine ELISA kit provides materials for the quantitative measurement of chemically derivatized normetanephrine in urine. The assay procedure follows the basic principle of competitive ELISA whereby there is competition between a biotinylated and a non-biotinylated antigen for a fixed number of antibody binding sites. The kit is a 12 x 8 well format. *FOR RESEARCH USE ONLY!*	1 each	545.75
158381 0-5°C	**1-NOROKADAONE** [131204-29-0] **Purity ≥ 98%** Serine/Threonine Phosphatase Inhibitor. Possible okadaic acid negative control. $C_{43}H_{66}O_{11}$ MW 758.99	50 µg 100 µg	197.65 375.50
153555 RT	**NORTRIPTYLINE** [894-71-3] (3-(10,11-Dihydro-5H-dibenzo[a,d]-cyclohepten-5-ylidene)-N-methyl-1-propanamine) **Hydrochloride** A norepinephrine uptake inhibitor. $C_{19}H_{21}N \bullet HCl$ MW 299.8	250 mg 1 g	21.75 43.35
153556 RT	**NORTRIPTYLINE METABOLITE, (±)-E-10-HYDROXYLATED** [37439-89-7] ((R,S)-(E)-3-(10-Hydroxy-10,11-dihydro-5H-dibenzo[a,d]cycloheptene-5-ylidene)-N-methyl-l-propanamine) $C_{19}H_{21}NO$ MW 279.4	1 mg 2 mg	122.90 202.45
153557 RT	**NORTRIPTYLINE METABOLITE, (±)-Z-10-HYDROXYLATED** [37439-87-5] ((R,S)-(Z)-3-(10-Hydroxy-10,11-dihydro-5H-dibenzo[a,d]cycloheptene-5-ylidene)-N-methyl-l-propanamine) $C_{19}H_{21}NO$ MW 279.4	1 mg 2 mg	122.90 202.45
153558 RT	**NOSCAPINE** [128-62-1] (Narcotine) S(R*,S*)-6,7-Dimethoxy-3-(5,6,7,8-tetrahydro-4-methoxy-6-methyl-1,3-dioxolo[4,5-g]-isoquinolin-5-yl)-1(3H)-isobenzofuranone $C_{22}H_{23}NO_7$ MW 413.4	250 mg 1 g	14.45 43.35
155957 0-5°C	**NOVOBIOCIN** [1476-53-5] **Sodium Salt** **Purity: ~90%** **Crystalline** Topoisomerase II inhibitor $C_{31}H_{35}N_2O_{11}Na$ MW 634.6	1 g 5 g 25 g 100 g	18.15 60.15 224.35 630.65
159187 0°C	**NPC-14686** **Purity: 99%** Anti-inflammatory agent. **Ref.:** 1. Burch, R.M., Advances in Understanding and Treatment of Rheumatoid Arthritis, Philadelphia, (1991) conference proceedings. MW 401.4	200 mg 500 mg 1 g	63.05 137.60 258.00
159981 RT	**NS-398** [123653-11-2] **Purity: 98%** Specific inhibitor of PGH synthase-2. **Ref.:** Futaki, N., et al., *Prostaglandins*, **47**, 55 (1994). MW 314.4	1 mg 5 mg 10 mg	32.05 145.65 252.25
155959 RT	**NUCLEAR YELLOW** [74681-68-8] (2-[4-Sulfamylphenyl]-6-[6-(4-methylpiperazino)-2-benzimidazolyl]benzimidazole trihydrochloride) **Dye content: Approx. 80%** A fluorescent neuronal tracer. **Ref.:** 1. Bentivoglio, M., et. al., Neurosci. Lett., **18**, 25 (1980). 2. Kuypers, H.G.J.M. and Huisman, A.M., Adv. Cellular Neurobiol., **5**, 307 (1984). $C_{25}H_{25}N_7O_2S \bullet 3HCl$ MW 597	25 mg 100 mg 250 mg	39.30 137.60 321.05
155963 RT	**NYLIDRIN** [849-55-8] **Hydrochloride** **Purity: 95%** β-Adrenergic receptor agonist $C_{19}H_{25}NO_2 \bullet HCl$ MW 335.9	1 g 5 g 10 g 25 g	10.20 37.50 70.25 170.50

-O-

	1-O-OCTADECYL-2-O-ACETYL-sn-GLYCERO-1-PHOSPHORYLCHOLINE *See*: L-α-Phosphatidylcholine-β-Acetyl-γ-O-Octadecyl		
159016 RT	**3-(4-OCTADECYL)-BENZOYLACRYLIC ACID** (OBAA) **Purity: 98%** Strongly blocks snake venom PLA_2. Also demonstates inhibition of allergen induced bronchospasm. **Ref** 1. Kohler, T., et.al., Agents Actions, **32**,144 (1991). 2. Madi, S., et.al., ibid., **32**, 144 (1991). $C_{28}H_{44}O_3$ MW 428.4	10 mg 25 mg 50 mg	88.20 195.00 364.05

CATALOG NUMBER			U.S. $
159188 -20°C	**1-O-OCTADECYL-sn-GLYCERO-3-PHOSPHORYLCHOLINE** [74430-89-0] (Lyso-PAF c-18) **Purity: 99%** Inactive platelet activating factor metabolite. **Ref.:** Wykle, R.L., et.al., Biochem. Biophys. Res. Commun., **100**, 1651 (1981). MW 509.7	5 mg 10 mg 25 mg	54.45 103.45 255.60
191509 0°C	**1-O-OCTADECYL-2-O-METHYL-sn-GLYCERO-3 PHOSPHORYLCHOLINE** Inhibits protein kinase C from various leukemia cells. Displays antineoplastic activity. **Ref.:** (1) D.M. Helfman, et al., Cancer Res., **43**, 2955 (1983). MW 523.7	1 mg 5 mg 10 mg	39.80 75.50 143.15
159635 0-5°C	**4-(4-OCTADECYL)-4-OXOBENZENEBUTENOIC ACID** Phospholipase A2 inhibitor $C_{28}H_{44}O_3$ MW 428.6	5 mg 25 mg	45.10 182.40
159189 0°C	**17-OCTADECYNOIC ACID** [34450-18-5] (17-ODYA) **Free Acid** **Purity: 99%** Specifically inhibits LTB_4 ω-oxidase. **Ref.:** Shak, S., et.al., J. Biol. Chem., **260**, 13023 (1985). $C_{18}H_{32}O_2$ MW 280.4	1 mg 5 mg 10 mg	21.20 97.45 172.00
16024 0-5°C	**N-OCTANOYL-D-*erythro*-SPHINGOSINE [Octanoyl-1-^{14}C]** Sp. Act. 25-50 mCi/mmol 0.925-1.85 GBq/mmol Ethanol solution. *Please call for delivery information.* MW 397.5	50 µCi	726.45
26041 0-5°C	**N-OCTANOYL-D-*erythro*-SPHINGOSINE [Octanoyl-1-^{3}H]** Sp. Act. 5-10 Ci/mmol 1.85-3.70 GBq/mmol Ethanol solution. *Please call for delivery information.* MW 397.5	50 µCi	726.45
193701 RT	**OCTOCLOTHEPIN** [4789-68-8] **Maleate Salt** A D_2 dopamine and serotonin receptor antagonist. $C_{19}H_{21}N_2SCl \bullet C_4H_4O_4$ MW 461.0	10 mg 50 mg	23.15 94.80
150143 RT	DL-**OCTOPAMINE** [770-05-8] [DL-1-(p-Hydroxyphenyl)-2-aminoethanol] **Hydrochloride** **Crystalline** Sympathomimetic $C_8H_{11}NO_2 \bullet HCl$ MW 189.6	1 g 5 g 10 g 50 g	6.85 18.30 35.80 173.80
158971 -20-0°C	**(+)-7-OCTYLINDOLACTAM V** [123597-54-6] **Purity: 99%** Inactive isomer used as a negative control. $C_{26}H_{37}N_3O_2$ MW 423.6	1 mg	311.40
158972 -20-0°C	**(-)-7-OCTYLINDOLACTAM V** [109346-66-9] **Purity: 99%** Analog of teleocidin which is a non-phorbol activator of protein kinase C. It has higher potency and metabolic stability. **Ref.:** 1. Fujiki, H. and Sugimura, T., Adv. Cancer Res., **49**, 223 (1987). 2. Collins, M. and Rozengurt, E., Biochem. Biophys. Res. Commun., **104**, 1159 (1982). $C_{26}H_{37}N_3O_2$ MW 423.6	1 mg 5 mg	172.00 785.40

CATALOG NUMBER			U.S. $
159190 0°C	**OCTYLONIUM BROMIDE** [26095-59-0] **Purity: 98%** Exhibits high affinity for platelet PAF receptors. Useful clinical spasmolytic agent for increased muscle tone. **Ref.:** 1. Ortega, M.P., et.al., J. Pharmacol. Exp. Ther., **255**, 28 (1990). 2. Whatley, R.E., et.al., Prostaglandins, **43**, 21 (1992). 3. Mudler, H.W., et.al., Biochem. Bhiphys. Res. Commun., **176**, 1557 (1991). MW 563.6	5 mg 10 mg 25 mg	108.95 200.65 452.90
	ODQ *See*: 1H-[1,2,4]Oxadiazolo[4,3-a]quinoxalin-1-one		
193514 0-5°C	**OKADAIC ACID** [78111-17-8] **Free Acid** **Purity ≥ 98%** Potent inhibitor of serine/threonine-specific protein phosphatases 1 and 2A (PP1 and PP2A) and of 2B at higher concentrations. Does **not** inhibit protein tyrosine phosphatases or kinases which have been tested. $C_{44}H_{68}O_{13}$ MW 805.01	100 µg 300 µg	212.85 583.95
158973 -20-0°C	**OKADAIC ACID** [78111-17-8] **Potassium Salt** **Purity: ≥98%** $C_{44}H_{67}KO_{13}$ MW 843.1	10 µg 25 µg 50 µg 100 µg	33.85 60.70 98.55 166.80
158974 -20-0°C	**OKADAIC ACID** **Sodium Salt** **Purity: ≥98%** $C_{44}H_{67}O_{13}Na$ MW 828	10 µg 25 µg 50 µg 100 µg	40.40 81.40 135.50 265.10
	OKADAIC ACID, 7-O-PALMITOYL *See*: 7-O-Palmitoylokadaic acid		
158384 0-5°C	**OKADAIC ACID 7,10,24,28-TETRAACETATE** [78111-15-6] **Purity ≥ 98%** Serine/Threonine protein phosphatase inhibitor $C_{52}H_{76}O_{17}$ MW 973.16	50 µg 100 µg	83.70 157.80
158385 0-5°C	**OKADAOL** [131959-12-1] **Purity ≥ 98%** Okadaic acid analog Serine/Threonine protein phosphatase inhibitor. $C_{44}H_{70}O_{12}$ MW 791.03	50 µg 100 µg	135.00 260.00
191510 -20°C	**(±)-1-OLEOYL-2-ACETYLGLYCEROL** [92282-11-6] **Purity: 98%** Potent, membrane-permeable activator of protein kinase C. $C_{23}H_{42}O_5$ MW 398.6	5 mg 10 mg 25 mg 50 mg	53.35 91.75 192.05 375.00
159015 0°C	**OLEYLOXYETHYL PHOSPHORYLCHOLINE** **Purity: 98%** Specifically inhibits PLA_2. **Ref.:** 1. Mayolda, R.L., et.al., Prostaglandins, Leukotrienes, and Lipoxins, (J.M. Bailey, ed.), Plenum, N.Y., 669 (1985). 2. Kauser, K., et.al., Circulation Res., **68**, 1154 (1991). MW 477.7	10 mg 25 mg 50 mg	57.35 131.90 252.25
151786 0-5°C	**OLIGOMYCIN** [1404-19-9] A mixture of oligomycin A, B, and C in approx. ratio 60:30:10 Antibiotic that inhibits respiration in mitochondria	1 mg 5 mg 10 mg	20.80 55.05 104.20

Neuroscience

CATALOG NUMBER			U.S. $
151783 **0-5°C**	**OLIGOMYCIN A** [579-13-5] (Olivomycin) From *Streptomyces olivoreticuli* m.p. 140-141°C Reportedly inhibits growth of *Aspergillus niger* and other moulds. **Ref.:** Nakakita, V., et al., J. Antibiot., 33, 514 (1980). $C_{45}H_{74}O_{11}$ MW 791.1	1 mg 5 mg	20.25 49.25
151784 **0-5°C**	**OLIGOMYCIN B** [11050-94-5] **Crystalline** $C_{45}H_{72}O_{12}$ MW 805.1	1 mg 5 mg	111.35 421.00
151785 **0-5°C**	**OLIGOMYCIN C** [11052-72-5] **Crystalline** Antibiotic $C_{28}H_{46}O_6$ MW 478.7	1 mg 5 mg	80.30 364.55
159805 **-20°C**	**OLOMOUCINE** [101622-51-9] (6-Benzylamino-2-(2-hydroxyethylamino)-9-methylpurine) **Purity: 99%** Selective inhibitor of cdc2, cdk and other cyclin-related kinases. $C_{15}H_{18}N_6O$ MW 298.4	1 mg 5 mg 25 mg	18.35 71.10 282.10
159636 **0-5°C**	**OPHIOBOLIN A** [4611-05-6] (Cochliobolin A) From *Helminthosporium sp.* **Purity: 95+%** Calmodulin inhibitor **Ref.:** Leung, P.C., et al., *Int. J. Biochem.*, **20**, 1351 (1988). $C_{25}H_{36}O_4$ MW 400.6	1 mg 5 mg	65.35 261.40
2942000 **-20°C**	**OPOSSUM SERUM** From *Didelphis virginia* A rare animal sera suitable for eukaryotic cultures. Ideal for neuroscience investigations.	1 ml	78.00
102514 **RT**	**D-ORNITHINE** [16682-12-5] (D-2,5-Diaminopentanoic acid) **Hydrochloride** **Crystalline** **Purity: ~99%** $C_5H_{12}N_2O_2$ • HCl MW 168.6	1 g 5 g 10 g	13.50 47.25 85.95
100421 **RT**	**L-ORNITHINE** [3184-13-2] (L-2,5-Diaminopentanoic acid) **Hydrochloride** **Crystalline** **Purity: ~99%** This material is essentially free of citrulline and ammonia. $C_5H_{12}N_2O_2$ • HCl MW 168.6	5 g 25 g 100 g 1 kg 5 kg	6.10 12.65 31.60 212.10 1015.20
16012 **0-5°C**	**L-ORNITHINE [^{14}C(U)]** Sp. Act. >250 mCi/mmol >9.25 GBq/mmol 0.01N HCl solution. *Please call for delivery information.* $NH_2(CH_2)_3CH(NH_2)COOH$ MW 132.1	10 µCi 50 µCi	411.10 908.35
102541 **0-5°C**	**OUABAIN** [630-60-4] (G-Strophanthin) **Crystalline** **Octahydrate** An inhibitor of sodium-potassium-ion-dependent ATPase. **Ref.:** J. Pharmacol. Exp. Ther., 189, 434 (1974). $C_{29}H_{44}O_{12}$ • $8H_2O$ MW 728.8	250 mg 1 g 5 g 25 g	19.30 47.25 181.35 707.90

CATALOG NUMBER			U.S. $
193702 **0-5°C**	**1H-[1,2,4]OXADIAZOLO[4,3-a]-QUINOXALIN-1-ONE** (ODQ) A potent, selective inhibitor of NO-sensitive guanylyl cyclase. **Ref.:** Boulton, et al., Neuroscience, **69**, 699 (1995). $C_9H_5N_3O_2$ MW 187.2	5 mg 25 mg	40.95 187.00
159806 **0-5°C**	**4-OXATETRADECANOIC ACID** Inhibits HIV replication. **Ref.:** Langer, C.A., et al., J. Biol. Chem., **267**, 17159 (1992). $C_{13}H_{26}O_3$ MW 230.3	1 mg 5 mg 10 mg	29.80 90.55 146.20
159639 **0°C**	**20-OXO-20-DEOXYPHORBOL 12,13-DIBUTYRATE** [100930-03-8] **Purity: 98%** For the preparation of tritiated Phorbol 12,13-dibutyrate $C_{28}H_{38}O_8$ MW 502.6	1 mg 5 mg	135.15 546.00
159640 **0°C**	**20-OXO-20-DEOXYPHORBOL 12-MYRISTATE 13-ACETATE** [30358-69-1] **Purity: 98%** For the preparation of tritiated PMA $C_{36}H_{54}O_8$ MW 614.8	1 mg 5 mg	125.05 510.35
159642 **0°C**	**20-OXO-12,20-DIDEOXYPHORBOL 13-ISOBUTYRATE** [123597-58-0] **Purity: 98%** Used to prepare tritiated 12-Deoxyphorbol 13-isobutyrate $C_{24}H_{32}O_6$ MW 416.5	1 mg 5 mg	169.75 655.00
159643 **0°C**	**20-OXO-12,20-DIDEOXYPHORBOL 13-PHENYLACETATE** [138574-84-2] **Purity: 98%** For the preparation of tritiated 12-Deoxyphorbol 13-phenylacetate $C_{23}H_{32}O_6$ MW 464.6	1 mg 5 mg	175.50 692.20
153610 **0-5°C**	**OXOTREMORINE METHIODIDE** (Oxotremorine M) $C_{11}H_{19}IN_2O$ MW 322.2	25 mg 50 mg 100 mg	26.10 47.05 86.75
153609 **0-5°C**	**OXOTREMORINE SESQUIFUMARATE** [17360-35-9] (1-[4-(1-Pyrrolidinyl)-2-butynyl]-2-pyrrolidinone sesquifumarate) $C_{12}H_{18}N_2O$ • $3/2C_4H_4O_4$ MW 380.4	25 mg 50 mg 100 mg	10.90 17.35 28.85
190255 **RT**	**OXYMETAZOLINE** [1491-59-4] (2-[3-Hydroxy-2,6-dimethyl-4-t-butyl-benzyl]-2-imidazoline) **Hydrochloride** **Crystalline** Adrenergic compound $C_{16}H_{24}N_2O$ • HCl MW 296.8	5 g 10 g 25 g 100 g	30.65 54.20 117.65 327.40
100896 **-20-0°C**	**OXYTOCIN** [50-56-6] (α-Hypophamine; Cys-Tyr-Ile-Gln-Asn-Cys-Pro-Leu-Gly-NH_2) Contains Cys^1-Cys^6 disulfide bond. In 0.25% acetic acid with 0.5 % chlorobutanol as preservative. **Activity:** ~20 units/cc $C_{43}H_{66}N_{12}O_{12}S_2$ MW 1007.2	100 ml 1 liter 5 liter	9.85 80.55 390.15
191057 **-20-0°C**	**OXYTOCIN** [50-56-6] (α-Hypophamine; Cys-Tyr-Ile-Gln-Asn-Cys-Pro-Leu-Gly-NH_2) Contains Cys^1-Cys^6 disulfide bond. Lyophilized white powder. **Activity:** ~500 I.U./mg $C_{43}H_{66}N_{12}O_{12}S_2$ MW 1007.2	500IU 1000IU 5000IU	47.70 84.50 351.85

CATALOG NUMBER			U.S. $
152959 **-20-0°C**	**[Thr^4,Gly^7]-OXYTOCIN** [60786-59-6] (Cys-Tyr-Ile-Thr-Asn-Cys-Gly-Leu-Gly-NH_2) Contains disulfide bond between Cys^1 and Cys^6. A selective oxytocin agonist. **Ref:** Lowbridge, J., et al., J. Med. Chem., **20**, 120 (1977). $C_{39}H_{61}N_{11}O_{12}S_2$ MW 940.1	0.5 mg 1 mg 5 mg	20.00 31.70 138.00

-P-

692461 **0-5°C**	**p53 ONCOPROTEIN** *POLYCLONAL ANTIBODY* **Anti-Human p53** **Host:** rabbit **Form:** purified antiserum **Conc/Titer:** 1:50-1:100 **Applications:** immunopreciptin; immunohistology; frozen and paraffin-embedded sections This antibody reacts with wild type and most mutant forms of p53.	0.25 ml	242.55
193532 **0-5°C**	**PACLITAXEL** [33069-62-4] (Taxol®) From the Pacific Yew Tree *Taxus brevifolia* Antitumor agent which lowers the critical concentration for tubulin polymerization and reversibly binds to tubulin prohibiting depolymerization. **Purity: >98%** $C_{47}H_{51}NO_{14}$ MW 853.9	1 mg 5 mg 25 mg 100 mg	13.65 43.80 156.50 425.00
159644 **0°C**	**7-O-PALMITOYLOKADAIC ACID** **Purity: ~90-94%** $C_{60}H_{98}O_{14}$ MW 1043.4	25 µg	258.00
158975 **-20-0°C**	**N-PALMITOYL-D-SPHINGOSINE** [24696-26-2] (N-Hexadecanoyl-D-sphingosine; C_{16} ceramide; palmitoyl ceramide) **Purity: 98%** Stimulates cytosolic serine/threonine protein phosphatase in T9 cells. Induces phosphorylation on Thr-669 in A-431 cells. **Ref.:** 1. Dobrowsky, R.T. and Hannum, Y.A., et al., J. Biol. Chem., **267**, 5048 (1992). 2. Mathias, S., et al., Proc. Natl. Acad. Sci. USA, **88**, 10009 (1991). $C_{34}H_{67}NO_3$ MW 537.9	1 mg 5 mg 25 mg	33.85 137.20 613.40
16013 **0-5°C**	**N-PALMITOYL-D-SPHINGOSINE, [Palmitoyl-1-^{14}C]** Sp. Act. 50-60 mCi/mmol 1.85-2.22 GBq/mmol Ethanol solution. *Please call for delivery information.* MW 537.9	50 µCi	1211.55
159986 **-20°C**	**PALMITYLETHANOLAMIDE** **Purity: 98%** Negative control for anandamide. **Ref.:** Devane, W.A., et al., *Science*, **258**, 1946 (1992). MW 299.5	10 mg 25 mg	57.35 120.40
158976 **-20-0°C**	**PALYTOXIN** [77734-91-9] **Purity: 98%** Non-peptide toxin from various species of *Palythoa*. Potently activates tetrodotoxin-insensitive Na^+ channels. Stimulates the release of catecholamine and the metabolism of arachidonic acid. It does not compete for the TPA receptor. **Ref.:** 1. Beress, L., et al., Toxicology, **21**, 285 (1983). 2. Muramatsu, I., et al., J. Pharmacol. Exp. Ther., **231**, 488 (1984). 3. Nakanishi, A., et al., Neurosci. Lett., **121**, 163 (1991). 4. Lazzaro, M., et al., Endocrinology, **120**, 1338 (1987). 5. Levine, L., et al., Prostaglandins, **31**, 669 (1986). $C_{129}H_{223}N_3O_{54}$ MW 2677.4	10 µg 25 µg 50 µg 100 µg	177.70 362.25 700.20 1216.30
190261 **RT**	**PAPAVERINE** [61-25-6] (6,7-Dimethoxy-1-veratrylisoquinoline) **Hydrochloride** **Crystalline** **Purity: ~99%** Phosphodiesterase inhibitor $C_{20}H_{21}NO_4$ • HCl MW 375.9	5 g 25 g 100 g	13.40 41.75 117.50
195366 **0°C**	**PARGYLINE** [306-07-0] (N-Methyl-N-propargylbenzylamine; N-Methyl-N-α-propynylbenzylamine) **Hydrochloride** **Crystalline** **Purity: 99%** Inhibits MAO. Potential for treating hypertension. Not for use in humans. $C_{11}H_{13}N$ • HCl MW 195.7	500 mg 1 g 5 g	16.15 27.30 115.70
159988 **-20°C**	**PARTHENOLIDE** [20554-84-1] **Purity: 97%** Demonstrates anti-inflammatory, anti-secretory, and spasmolytic activity. Sesquiterpene lactone from *Chrysanthemem parthenium* used as a herbal remedy for migrane headaches and arthritis. **Ref.:** 1. Barsby, R.W., et al., *J. Biol. Pharmacol.*, **44**, 737 (1992). 2. Sumner, H., et al., *Biochem. Pharmacol.*, **43**, 2313 (1992). $C_{15}H_{20}O_3$ MW 248.3	25 mg 50 mg	61.85 98.15
159989 **-20°C**	**PATULIN** [149-29-1] A mycotoxin which blocks the farnesylation of proteins in a cell free assay. It inhibits the incorporation of ^{3}H-mevalonate into proteins found in complete cells. **Ref.:** Miura, S., et al., *FEBS Lett*, **318**, 88 (1993). *POSSIBLE CARCINOGEN!* $C_7H_6O_4$ MW 154.1	2 mg 5 mg 10 mg	43.00 77.00 122.00
696002 **696001**	**PAXILLIN** *MONOCLONAL ANTIBODY* **Anti-Human** **Clone:** 349 **Isotype:** purified Ig fraction from mouse ascites **Conc/Titer:** 1:1,000-1:5,000 **Applications:** Immunoblotting; Immunoprecipitation Paxillin localizes to the focal adhesions at the ends of actin stress fibers in chicken embryo fibroblasts. It is present in the focal adhesions of the Madin-Darby bovine kidney epithelial cells but is absent from cell-cell adherens junctions of these cells. When purified from chicken gizard, it migrates as a diffuse band on SDS-PAGE with M_r of 65-70 kDa and exists insmultiple isoforms. The antibody is packaged at a concentration of 1 mg/ml in 50% glycerol, 5mM TRIS, pH 8.2, 25mM NaCl, 1.5mM NaN_3.	50 µg 100 µg	299.00 395.00
193944 **-20°C**	**PAXILLINE** [57186-25-1] From *Penicillium paxilli* This fungal mycotoxin possess potent excitatory action on acetylcholine release from nerve terminals. It specifically inhibits smooth muscle high conductance Ca^{2+}-activated K^+ channels, as well as, enhances [^{125}I]-charybotoxin binding to these channels. **Ref.:** Knaus, et al., Biochemistry, **33**, 5819 (1994). MW 435.6	1 mg 5 mg	33.05 61.40

CATALOG NUMBER			U.S. $
198594 **RT**	**PCO-400** [121055-10-5] ([-]-(3S,4R)-3,4-Dihydro-3-hydroxy-2,2-dimethyl-4-(3-oxo-cyclopent-1-enyl-2-oxy)-2H-1-benzypyran-6-carbonitrile) Potassium channel opener. **Purity: >95%** $C_{17}H_{17}NO_4$ MW 299.3	20 mg 100 mg	63.00 229.70
193945 **-20°C**	**PENITREM A** [12627-35-9] (Tremortin A) From *Penicillium palitans* A tremorgenic fungal mycotoxin which increases GABA release and aspartate from cerebrocortical synaptosomes and acetylcholine in rat neuromuscular junction. **Ref.:** Wilson, et al., Brain Res., **40**, 540 (1972). $C_{37}H_{44}NO_6Cl$ MW 634.2	1 mg	27.70
156107 **RT**	**PENTOXIFYLLINE** [6493-05-6] (Trental) Phosphodiesterase inhibitor. Also blocks synthesis of Tumor Necrosis Factor-α. $C_{13}H_{18}N_4O_3$ MW 278.3	10 g 100 g 250 g	19.75 134.85 295.80
153552 **RT**	**PENTYLENETETRAZOLE** [54-95-5] (Metrazole; 6,7,8,9-Tetrahydro-5H-tetrazolo-[1,5-a]azepine) $C_6H_{10}N_4$ MW 138.2	1 g 5 g	10.90 32.55
159191 **RT**	**α-PENTYL-3-(2-QUINOLINYL-METHOXY)BENZENEMETHANOL** (REV-5901) **Purity: 98%** Leukotriene D_4 antagonist and 5-lipoxygenase inhibitor. **Ref.:** 1. VanInwegen, R.G., et al., J. Pharmacol. Exp. Ther., **241**, 117 (1987). 2. Coutts, S.M., et al., In Prostaglandins Leukotrienes and Lipoxins (Plenum, NY) (1985), p.626. 3. Kusner, E.J., et al., Biochem. Pharmacol., **38**, 4283 (1989). 335.4	10 mg 25 mg 50 mg	63.05 137.60 258.00
159192 **RT**	**α-PENTYL-4-(2-QUINOLINYL-METHOXY)BENZENEMETHANOL** (L-655,238 CREV 5901, para isomer) **Purity: 98%** Specifically and strongly blocks 5-LO-activating protein (FLAP). **Ref.:** Evans, J.F., et al., Mol. Pharmacol., **40**, 22 (1991).	10 mg 25 mg 50 mg	74.55 172.00 315.30
195368 **-20°C**	**PEPSTATIN A** [26305-03-3] ((Isoval-Val-Val-Sta-Ala-Sta) Sta = statine = (3S,4S)-4-amino-3-hydroxy-6-methylheptanoic acid. **Synthetic** Inhibitor for pepsin, renin, cathepsin D, and other acid proteases. **Ref.:** 1. Umezawa, H., et al., J. Antibiot., **23**, 259 (1970). 2. Lazar, J., et al., Biochem. Pharmac., **23**, 2776 (1974). $C_{34}H_{63}N_5O_9$ MW 685.9	1 mg 5 mg 10 mg 25 mg 100 mg 250 mg	11.45 25.25 47.10 77.25 256.00 485.95
151814 **RT**	**PERHEXILINE** [6724-53-4] (2-[2,2-Dicyclohexylethyl]piperidine) **Maleate Salt** A calcium blocking agent $C_{19}H_{35}N \bullet C_4H_4O_4$ MW 393.6	1 g 5 g 10 g	21.25 70.40 139.60
159029 **0°C**	**PERILLIC ACID** [7694-45-3] **Purity: 95%** Inhibitor of isoprenylation of $p21^{ras}$ and other small G proteins. **Ref.:** Crowell, P.L., et al., J. Biol. Chem., **266**, 17679 (1991). MW 166.2	100 mg 500 mg	35.60 160.00
158977 **0-5°C**	**PERMETHRIN** [52645-53-1] Mixture of isomers A weakly active Type I pyrethrin for use as a "negative" control for the inhibition of calcineurin (protein phosphatase 2B) by Type II pyrethrins. $C_{21}H_{20}O_3Cl_2$ MW 391.29	10 mg 25 mg 50 mg	53.70 117.55 213.85
196033 **-20°C**	**PEROXYNITRITE** **Tetramethylammonium Salt** **Purity: ~90%** A novel new reactive oxygen species (ROS) created from nitric oxide and superoxide shown to be directly involved in apoptosis, cancer, stroke, heart and Alzheimer's disease. This product contains no nitrite, nitrate, metal ions or hydrogen peroxide contaminants and rapidly decomposes in the presence of moisture. $NO_3 \bullet (CH_3)_4N$ MW 127.08	1 mg 5 mg	68.25 294.00
150014 **0°C**	**PERTUSSIS TOXIN** [70323-44-3] Islet-Activating Protein isolated from *Bordetella pertussis*. Lyophilized powder, containing 50 µg protein in 0.01 M sodium phosphate buffer, pH 7.0, and 0.05 M sodium chloride. Each vial should be reconstituted with 500 µl of sterile distilled water, and the resulting suspension made uniform by gentle mixing. Do not sterile filter, since loss of material will result.	50 µg	302.30
152296 **0°C**	**PERTUSSIS TOXIN** [70323-44-3] Islet-Activating Protein isolated from *Bordetella pertussis*. Pure, lyophilized powder containing *no* buffer salts. Dissolves completely when reconstituted with sterile distilled water. Purity checked by SDS-PAGE and biological activity tested by lipolysis-promoting activity on rat adipocytes. This is a sterilized product, and may be used in cell-culture applications without pretreatment.	50 µg	286.65
159035 **0-5°C**	**PERTUSSIS TOXIN A PROTOMER** From *Bordatella pertussis* **Purity: 99%** Demonstrates NAD^+ glycohydrolase activity and ADP-ribosyltransferase activity. Like native pertussis toxin, it catalyzes ADP-ribosylation in broken cell preparations. **Ref.:** 1. Kopf, G.S. and Woolkalis, M.J., Methods Enzymol., **195**, 257 (1991). 2. Tamura, M., et al., Biochemistry, **21**, 5516 (1982).	10 µg	326.75
159034 **0-5°C**	**PERTUSSIS TOXIN B OLIGOMER** From *Bordetella perussis* Responsible for the attachment of the native form to eukaryotic cell surfaces. Also assists in the translocation of protomer A. It demonstrates T-cell mitogenesis in humans and helps platelet aggregation. **Ref.:** 1. Tamura, M., et al., Biochemistry, **21**, 5516 (1982). 2. Strand, C.F. and Carchman, R.A., FEBS Lett., **225**, 16 (1987). 3. Tamura, M., et al., ibid., **258**, 6756 (1983)	40 µg	452.90

CATALOG NUMBER			U.S. $
153797 **RT**	**PHACLOFEN** [114012-12-3] (3-Amino-2-(4-chlorophenyl) propylphosphonic acid) Selective $GABA_B$ antagonist. $C_9H_{13}ClNO_3P$ MW 249.6	10 mg 15 mg 25 mg	191.60 273.35 433.80
159990 **-20°C**	**PHALLOIDIN** [17466-45-4] From *Amanita phalloides* **Purity: >95%** Potently and specifically inhibits the conversion of F-actin to G-actin. **Ref.:** Cooper, J.A., *J. Biol. Chem.*, **105**, 1473 (1987). $C_{35}H_{48}N_8O_{11}S$ MW 788.9	1 mg	206.35
159992 **0°C**	**PHE-MET-ARG-D-PHE AMIDE** [84413-35-4] **Purity; 97%** [D-Phe^4]-Molluscan Cardioexcitatory Neuropeptide analog. **Ref.:** Mues, G., et al., *Life Sci.*, **31**, 2555 (1982). $C_{29}H_{42}N_8O_4S$ MW 598.8	1 mg	28.65
159994 **0°C**	**D-PHE-MET-ARG-PHE AMIDE** [84313-42-8] **Purity; 97%** [D-Phe^1]-Molluscan Cardioexcitatory Neuropeptide analog. **Ref.:** Mues, G., et al., *Life Sci.*, **31**, 2555 (1982). $C_{29}H_{42}N_8O_4S$ MW 598.8	1 mg	26.65
153163 **-20-0°C**	**PHE-MET-ARG-PHE AMIDE** [64190-70-1] (Molluscan Cardioexcitatory Neuropeptide) **Ref:** 1. Price, D. and Greenberg, M.J., Science, **197**, 670 (1977). 2. Greenberg, M.J., et al., Neuropeptides, **1**, 309 (1981). $C_{29}H_{42}N_8O_4S$ MW 598.8	0.5 mg 1 mg 5 mg	28.25 42.70 119.30
159807 **0-5°C**	**PHENAMIL** [2038-35-9] (3,5-Diamino-6-chloro-N-[imino(phenylamino)methyl]-pyrazinecarboxamide) An amiloride analog which irreversibly blocks amiloride-sensitive sodium channels. $C_{12}H_{12}N_7OCl$ MW 305.7	1 mg 5 mg	21.80 87.15
196028 **RT**	**6(5H)-PHENANTHRIDINONE** [1015-89-0] (PARP Inhibitor) **Purity: ≥98%** Displays immunosuppressive activity. Inhibits concanavalin A-induced lymphocyte proliferation at micromolar concentrations. MW 195.2	50 mg 200 mg	23.10 73.50
151821 **0-5°C**	**PHENOXYBENZAMINE** [63-92-3] (Benzene methanamine) **Hydrochloride** Selective α-adrenergic blocking agent. Irreversible calmodulin inhibitor. $C_{18}H_{22}NO \bullet HCl$ MW 340.3	250 mg	161.40
153795 **RT**	**PHENTOLAMINE MESYLATE** [65-28-1] (REGITIN) (3-[[(4,5-Dihydro-1H-imidazol-2-yl)methyl](4-methylphenyl)-amino]phenol mesylate) $C_{17}H_{19}N_3O \bullet CH_3SO_3H$ MW 377.5	25 mg 50 mg 100 mg	13.00 21.75 39.80
153796 **0-5°C**	**N^6-PHENYLADENOSINE** A_1 adenosine receptor agonist $C_{16}H_{17}N_5O_4$ MW 343.3	10 mg 15 mg 25 mg	45.55 50.60 65.10
153794 **-20-0°C**	**2-PHENYLAMINOADENOSINE** [53296-10-9] A_2 adenosine agonist $C_{16}H_{18}N_6O_4$ MW 358.4	10 mg 15 mg 25 mg	70.00 98.00 157.00
193703 **RT**	**N-PHENYLANTHRANILIC ACID** [91-40-7] (Diphenylamine-2-carboxylic acid; DPC) A Cl^- channel blocker. $C_{13}H_{11}NO_2$ MW 213.2	500 mg 1 g	22.05 39.70
153568 **RT**	**1-PHENYLBIGUANIDE** [102-02-3] (N-Phenyl-imidocarbonimidic diamide) 5-HT_3 serotonin agonist $C_8H_{11}N_5$ MW 177.2	250 mg 1 g	21.75 43.35
153567 **RT**	**PHENYLBUTAZONE** [50-33-9] (4-Butyl-1,2-diphenyl-3,5-pyrazolidinedione) $C_{19}H_{20}N_2O_2$ MW 308.4	25 g 100 g	56.60 180.55
196047 **0-5°C**	***cis*-N-(2-PHENYLCYCLOPENTYL)-AZACYCLOTRIDEC-1-EN-2-AMINE** [40297-09-4] (MDL-12330A) **Hydrochloride** **Purity: ≥98%** Inhibits adenylate cyclase. **Ref.:** Ferretti, M.E., et al., Neurosci. Lett., **207(3)**, 191-194 (1996). $C_{23}H_{38}N_2$ MW 377.0	1 mg 5 mg 25 mg	10.50 34.15 131.50
153566 **RT**	***trans*-2-PHENYLCYCLOPROPYL-AMINE** [95-62-5] (Tranylcypromine) **Hydrochloride** Monoamine Oxidase inhibitor $C_9H_{11}N \bullet HCl$ MW 169.7	250 mg 1 g	28.85 71.80
156170 **0-5°C**	***trans*-2-PHENYLCYCLOPROPYL-AMINE** [13492-01-8] (Tranylcypromine) **Hemisulfate Salt** Monoamine Oxidase inhibitor $C_9H_{11}N \bullet 1/2H_2SO_4$ MW 182.2	1 g 5 g 25 g	16.10 80.00 395.20
158978 **0°C**	**DL-*threo*-1-PHENYL-2-DECANOYL-AMINO-3-MORPHOLINO-1-PROPANOL** (DL-PDMP) **Purity: 98%** Blocks the glucosylation of ceramide by inhibiting UDP-glucose: ceramide glucosyltransferase. Inhibits cell surface glycolipid antigen expression and the growth of rabbit skin cultures. Also, demonstrates antitumor activity. **Ref.:** 1. Vunnam, R.R. and Radin, N.R., Chem. Phys. Lipid., **26**, 265 (1980). 2.Inokuchi, J.-I., et al., J. Cell Physiol., **141**, 573 (1989). 3. Uemura, K.-I., et al., J. Biochem., **108**, 525 (1990). 4. Inokuchi, J.-I., et al., Cancer Lett., **38**, 23 (1987).	10 mg 25 mg 50 mg	55.00 131.90 252.25
195380 **RT**	**L-PHENYLEPHRINE** [61-76-7] **Hydrochloride** **Purity: 99%** α_1-adrenergic agonist $C_9H_{13}NO_2 \bullet HCl$ MW 203.7	1 g 5 g 10 g 25 g 50 g 100 g	11.20 17.80 28.15 54.40 88.35 152.75
153793 **0-5°C**	**N^6-(2-PHENYLETHYL)-ADENOSINE** [20125-39-7] A_1 adenosine receptor agonist $C_{18}H_{21}N_5O_4$ MW 371.4	10 mg 15 mg 25 mg	45.55 65.10 101.25
193775 **0-5°C**	**PHENYLETHYL CAFFEATE** [104594-70-9] (Phenethyl caffeate) A cytotoxic agent to cancer cell lines. Acts as an inhibitor of protein tyrosine kinase and ornithine decarboxylase. **Ref.:** Rao, C.V., et al., Chem. Biol. Interactions, **84**, 277-90 (1992). $C_{17}H_{16}O_4$ MW 284.3	10 mg 25 mg 50 mg 100 mg	19.85 36.40 51.80 71.65

CATALOG NUMBER			U.S. $
193776 0-5°C	**PHENYLETHYL DIMETHYL CAFFEATE** [14551-14-0] (Phenethyl dimethyl caffeate) Inhibitor of protein tyrosine kinase and ornithine decarboxylase. **Ref.:** Rao, C.V., et al., Chem. Biol. Interactions, **84**, 277-90 (1992). $C_{19}H_{20}O_4$ MW 312.4	10 mg 25 mg 50 mg 100 mg	18.75 35.30 47.40 60.65
	N-(6-PHENYLHEXYL)-5-CHLORO-1-NAPHTHALENE-SULFONAMIDE *See*: 5-Chloro-N-(6-phenylhexyl)-1-naphthalenesulfonamide		
153784 0-5°C	**R-(-)-N^6-(2-PHENYL-ISOPROPYL)ADENOSINE** [38594-96-6] (R(-)-PIA) A_1 adenosine receptor agonist $C_{19}H_{23}N_5O_4$ MW 385.4	10 mg 15 mg 25 mg	38.35 54.70 86.75
153783 0-5°C	**S(+)-N^6-(2-PHENYL-ISOPROPYL)ADENOSINE** [38594-97-7] $C_{19}H_{23}N_5O_4$ MW 385.4	10 mg 15 mg 25 mg	38.35 54.70 86.75
151838 RT	**L-β-PHENYLLACTIC ACID** [20312-36-1] (L-2-Hydroxy-3-phenylpropanoic acid) **Crystalline** Enzyme inhibitor $C_9H_{10}O_3$ MW 166.2	500 mg 1 g 5 g	14.35 26.20 115.10
193704 RT	**2-PHENYLMELATONIN** A melatonin antagonist. $C_{19}H_{20}N_2O_2$ MW 308.4	5 mg 25 mg	56.20 224.90
195381 0-5°C	**PHENYLMETHYLSULFONYL FLUORIDE** [329-98-6] (PMSF; Phenylmethanesulfonyl fluoride; α-toluenesulfonyl fluoride) **Crystalline** **Purity: 99%** Protease inhibitor. A relatively safe substitute for toxic di-isopropylfluorophosphate. Inhibits mammalian acetyl cholinesterase, but not those from fish sources. **Ref.:** 1. Fahrney, D.E. and Gold, A.M., J. Am. Chem. Soc., **85**, 997 (1963); 2. Moss, D.E. and Fahrney, D.E., Biochem. Pharmacology, **27**, 2693 (1978); 3. Turini, P., et al., J. Pharmacol. Exp. Ther., **167**, 98 (1969). $C_7H_7FO_2S$ MW 174.2	250 mg 1 g 5 g 25 g 100 g	11.60 16.90 41.50 127.85 371.35
159995 RT	**4-PHENYL-1-(4-PHENYL-BUTYL)PIPERIDINE** **Maleate Salt** **Purity: 98%** Sigma ligand. **Ref.:** Glennon, R.A., et al., *J. Med. Chem.*, **34**, 3360 (1991). MW 409.5	5 mg 10 mg 25 mg	47.55 76.85 166.80
153785 0-5°C	**3-PHENYLPROPARGYLAMINE** [30011-36-0] **Hydrochloride** Dopamine β-hydroxylase inhibitor $C_9H_9N \bullet HCl$ MW 167.6	25 mg 50 mg 100 mg	47.05 94.00 187.95
193779 0-5°C	**3-PHENYLPROPYL ISOTHIOCYANATE** [2627-27-2] A synthetic compound which induces Phase II detoxifying enzymes and inhibits chemically induced carcinogenesis. **Ref.:** Wilkinson, J.T., et al., Carcinogenesis, **16**, 1011-15 (1995). $C_{10}H_{11}NS$ MW 177.3	500 mg 1 g 5 g	19.85 27.55 104.75

CATALOG NUMBER			U.S. $
159996 -20°C	**S-[N-(3-PHENYLPROPYL)-THIOCARBAMOYL]-L-CYSTEINE** [137915-13-0] **Purity: 98%** Glutathione S-transferase inducer and chemical carcinogenesis inhibitor. **Ref.:** Zheng, G.-Q., et al., *J. Med. Chem.*, **35**, 185 (1992). $C_{13}H_{18}N_2O_2S_2$ MW 298.4	50 mg 100 mg 500 mg	66.65 100.20 421.20
151846 RT	**8-PHENYLTHEOPHYLLINE** [961-45-5] **Crystalline** A potent antagonist of adenosine-mediated accumulation of cAMP in a human fibroblast cell line. **Ref.:** Life Sci., **24**, 2475 (1979). $C_{13}H_{12}N_4O_2$ MW 256.3	25 mg 100 mg 500 mg	53.00 125.90 254.05
156206 RT	**1-PHENYL-3-(2-THIAZOLYL)-2-THIOUREA** [14901-16-7] **Crystalline** A dopamine β-hydroxylase inhibitor. **Ref.:** J. Pharmacol. Exp. Ther., **171**, 80 (1970). $C_{10}H_9N_3S_2$ MW 235.3	250 mg 1 g	26.15 73.60
159194 -20°C	**17-PHENYL-TRINOR-PROSTAGLANDIN E_2** [38315-43-4] **Purity: 98%** Specific agonist for EP_1. **Ref.:** Watson, S. and Abbott, A., Trends Pharmacol. Sci., **12**, suppl. 24 (1991). MW 386.5	1 mg 5 mg	68.75 315.30
153165 -20-0°C	**PHE-SER-TRP-GLY-ALA-GLU-GLY-GLN-ARG** [29705-92-8] (Experimental Allergic Encephalogenic Peptide) This peptide is the active fragment of myelin basic protein. It causes experimental allergic encephalo-myelitis (an inflammatory demyelinating disease of the CNS) via a cell-mediated immune response. **Ref:** 1. Shapira, R., et al., Science, **78**, 736 (1971). 2. Westall, F.C., et al., Nature, **229**, 22 (1971). MW 1037.1	0.25 mg 0.5 mg 1 mg	37.90 57.80 89.30
198674 0-5°C	**PHLEOMYCIN** [11006-33-0] From *Streptomyces verticillus*	5 mg	47.70
151849 0°C	**PHORBOL** [17673-25-5] (4β,9α,12β,13α,20-Pentahydroxy-tiglia-1,6-dien-3-one) White powder This is the parent diterpene, and may be used as starting material for preparing derivatives and as a control compound. *POSSIBLE CARCINOGEN!* $C_{20}H_{28}O_6$ MW 364.4	1 mg 5 mg 10 mg	24.80 121.80 218.90
151851 0°C	**4-α-PHORBOL** [26241-63-4] (4-α-PHR) White powder The C_4 epimer of phorbol. Useful as negative control since it is neither inflammatory nor tumor-promoting. *POSSIBLE CARCINOGEN!* $C_{20}H_{28}O_6$ MW 364.4	1 mg 5 mg 10 mg	25.60 123.05 204.95
151852 0°C	**PHORBOL-12-BUTYRATE** *POSSIBLE CARCINOGEN!* $C_{24}H_{34}O_7$ MW 434.5	1 mg 5 mg 10 mg	126.85 538.45 1020.00

CATALOG NUMBER			U.S. $
151853 **0°C**	**PHORBOL-13-BUTYRATE** [100929-94-0] Liquid in ampoule *POSSIBLE CARCINOGEN!* $C_{24}H_{34}O_7$ MW 434.5	1 mg 5 mg 10 mg	43.50 125.15 205.55
151854 **0°C**	**PHORBOL-12-DECANOATE** [76423-68-2] Liquid in ampoule *POSSIBLE CARCINOGEN!* $C_{30}H_{46}O_7$ MW 518.7	1 mg 5 mg 10 mg	45.00 178.60 321.60
151855 **0°C**	**PHORBOL-13-DECANOATE** [76423-69-3] Liquid in ampoule *POSSIBLE CARCINOGEN!* $C_{30}H_{46}O_7$ MW 518.7	1 mg 5 mg 10 mg	51.65 178.60 321.60
151856 **0°C**	**PHORBOL-12,13-DIACETATE** [24928-15-2] Off-white powder Weak tumor promoter, weakly inflammatory. *POSSIBLE CARCINOGEN!* $C_{24}H_{32}O_8$ MW 448.5	1 mg 5 mg 10 mg	36.05 141.00 232.55
151857 **0°C**	**PHORBOL-13,20-DIACETATE** [41621-85-6] White powder Intermediate for preparing phorbol diesters. *POSSIBLE CARCINOGEN!* $C_{24}H_{32}O_8$ MW 448.5	1 mg 5 mg 10 mg	91.50 304.90 510.30
159647 **0°C**	**4α-PHORBOL-12,13-DIACETATE** [56144-62-8] **Purity: 99%** Useful as a negative control for phorbol-12,13-diacetate. *POSSIBLE CARCINOGEN!* $C_{24}H_{32}O_8$ MW 448.5	1 mg 5 mg	44.55 182.10
26042 **0-5°C**	**PHORBOL-12,13-DIACETATE [20-^{3}H(N)]** (^{3}H-PDA) Sp. Act. 10-20 Ci/mmol 370-740 GBq/mmol Ethanol solution. *Please call for delivery information.* MW 448.5	50 µCi 250 µCi 1 mCi	241.35 568.80 1332.80
151858 **0°C**	**PHORBOL-12,13-DIBENZOATE** [25405-85-0] Off-white powder Moderately inflammatory, weak tumor promoter. *POSSIBLE CARCINOGEN!*	1 mg 5 mg 10 mg	45.65 120.75 200.45
151859 **0°C**	**PHORBOL-12,13-DIBUTYRATE** [37558-16-0] White powder Moderate tumor promoter *POSSIBLE CARCINOGEN!* $C_{28}H_{40}O_8$ MW 504.6	1 mg 5 mg 10 mg	38.10 98.50 187.15
158980 **-20-0°C**	**4α-PHORBOL 12,13-DIBUTYRATE** [93781-54-5] **Purity: 99%** *POSSIBLE CARCINOGEN!* $C_{28}H_{40}O_8$ MW 504.6	1 mg 5 mg	72.05 327.00
26043 **0-5°C**	**PHORBOL-12,13-DIBUTYRATE [20-^{3}H(N)]** (^{3}H-PDBu) Sp. Act. 15-30 Ci/mmol 0.555-1.11 TBq/mmol Ethanol solution. *Please call for delivery information.* MW 504.6	50 µCi 250 µCi 1 mCi	241.35 556.65 1332.80
151860 **0°C**	**PHORBOL-12,13-DIDECANOATE** [24928-17-4] Highly inflammatory Potent tumor promoter *POSSIBLE CARCINOGEN!* $C_{40}H_{64}O_8$ MW 672.9	1 mg 5 mg 10 mg	80.50 227.70 410.55
151861 **0°C**	**4-α-PHORBOL-12,13-DIDECANOATE** [27536-56-7] Standard negative control for phorbol-12,13-didecanoate *POSSIBLE CARCINOGEN!* $C_{40}H_{64}O_8$ MW 672.9	1 mg 5 mg 10 mg	86.75 374.55 656.40
158981 **-20-0°C**	**PHORBOL-12,13-DIHEXANOATE** [37558-17-1] **Purity: 99%** *POSSIBLE CARCINOGEN!* MW 560.8	1 mg	154.45
156221 **0°C**	**PHORBOL 16-HYDROXY 12-PALMITATE 13-ACETATE** [53202-98-5] *POSSIBLE CARCINOGEN!* $C_{39}H_{64}O_8$ MW 660.9	1 mg 5 mg	120.40 504.90
159651 **0°C**	**PHORBOL-20-METHOXYTRITYL ETHER** [115905-52-7] **Purity: ~96-98%** Intermediate used in the synthesis of phorbol derivatives. *POSSIBLE CARCINOGEN!* $C_{40}H_{44}O_7$ MW 636.8	5 mg 25 mg 100 mg	35.95 84.90 284.80
156222 **0°C**	**PHORBOL 12-MONOACETATE** [70470-59-6] *POSSIBLE CARCINOGEN!* $C_{22}H_{30}O_7$ MW 406.5	1 mg 5 mg 10 mg	50.60 384.55 656.50
156223 **0°C**	**PHORBOL 13-MONOACETATE** [32752-29-7] Off-white powder. *POSSIBLE CARCINOGEN!* $C_{22}H_{30}O_7$ MW 406.5	1 mg 5 mg 10 mg	117.55 298.85 510.00
151862 **0°C**	**PHORBOL-12-MONOMYRISTATE** [20839-06-9] Not inflammatory *POSSIBLE CARCINOGEN!* $C_{34}H_{54}O_7$ MW 574.8	1 mg 5 mg 10 mg	64.20 292.15 582.30
151863 **0°C**	**PHORBOL-13-MONOMYRISTATE** *POSSIBLE CARCINOGEN!* $C_{34}H_{54}O_7$ MW 574.8	1 mg 5 mg 10 mg	168.65 567.60 946.00
26044 **0-5°C**	**PHORBOL-12 MYRISTATE 13-ACETATE [20-^{3}H(N)]** (^{3}H-PMA) Sp. Act. 15-30 Ci/mmol 0.555-1.11 TBq/mmol Ethanol solution. *Please call for delivery information.* MW 616.8	50 µCi 250 µCi 1 mCi	241.35 556.65 1332.80
151864 **0°C**	**PHORBOL-12-MYRISTATE-13-ACETATE** [16561-29-8] (PMA) Very potent tumor promoter Highly inflammatory *POSSIBLE CARCINOGEN!* $C_{36}H_{56}O_8$ MW 616.8	1 mg 5 mg 10 mg 25 mg	36.10 130.50 250.55 625.25
158982 **-20-0°C**	**4α-PHORBOL 12-MYRISTATE 13-ACETATE** [63597-44-4] **Purity: 99%** *POSSIBLE CARCINOGEN!* $C_{36}H_{56}O_8$ MW 616.8	1 mg 5 mg	108.15 334.00
151866 **0°C**	**PHORBOL-12-RETINOATE-13-ACETATE** [80188-99-4] Yellow powder *POSSIBLE CARCINOGEN!* $C_{42}H_{56}O_8$ MW 688.9	1 mg 5 mg 10 mg	49.20 144.00 286.45
151867 **0°C**	**PHORBOL-12-TIGLIATE-13-DECANOATE** [59086-92-9] *POSSIBLE CARCINOGEN!* $C_{35}H_{52}O_8$ MW 600.8	1 mg 5 mg 10 mg	80.55 181.60 292.95

CATALOG NUMBER			U.S. $
151868 **0°C**	**PHORBOL-12,13,20-TRIACETATE** [19891-05-5] White powder *POSSIBLE CARCINOGEN!* $C_{28}H_{34}O_9$ MW 490.5	1 mg 5 mg 10 mg	42.55 123.20 204.90
156226 **0°C**	D-**α-PHOSPHATIDYLCHOLINE-β-ACETYL-γ-O-HEXADECYL** [117985-57-6] (3-o-Hexadecyl-2-o-acetyl-sn-glycero-1-phosphorylcholine; Enantio-PAF C-16) **Synthetic** **Purity: 98%** $C_{26}H_{54}NO_7P$ MW 523.7	0.5 mg 1 mg 5 mg	148.20 247.10 827.90
156229 **0°C**	L-**α-PHOSPHATIDYLCHOLINE-β-ACETYL-γ-O-(OCTADEC-9-*cis*-ENYL)** [85966-90-1] (Dehydro-PAF[C_{18}]) **Synthetic** **Purity: 99%** Yellow semi-solid. $C_{28}H_{56}NO_7P$ MW 549.7	1 mg 5 mg 10 mg	44.75 179.55 324.30
159196 **-20°C**	L-**α-PHOSPHATIDYLCHOLINE-β-ACETYL-γ-O-OCTADECYL** [79549-26-1] (Platelet Activating Factor C-18; 1-O-Octadecyl-2-O-acetyl-sn-glycero-3-phosphocholine) **Purity: 99%** Platelet activating factor $C_{28}H_{58}NO_7P$ MW 551.7	5 mg 10 mg 25 mg	98.60 177.70 355.40
159195 **-20°C**	L-**α-PHOSPHATIDYLCHOLINE-β-ARACHIDONOYL-γ-O-HEXADECYL** [86288-11-1] (1-O-Hexadecyl-2-O-arachidonoyl-sn-glycero-3-phosphorylcholine) **Purity: 98%** Platelet activating factor precursor in the lipid remodeling pathway. **Ref.:** Chilton, F.H., et al., J. Biol. Chem., **259**, 12014 (1984). $C_{44}H_{82}NO_7P$ MW 768.2	1 mg 5 mg 10 mg	51.60 235.05 447.20
156230 **0°C**	DL-**α-PHOSPHATIDYLCHOLINE, DILAUROYL** [18656-40-1] (1,2-Dididodecanoyl-rac-glycero-3-phosphocholine) **Purity: 99%** $C_{32}H_{64}NO_8P$ MW 621.8	25 mg 100 mg 500 mg	19.65 66.80 324.00
16014 **0-5°C**	**PHOSPHATIDYLCHOLINE-L-α-DIPALMITOYL, [2-Palmitoyl-1-^{14}C]** Sp. Act. 40-60 mCi/mmol 1.48-2.22 GBq/mmol Ethanol:toluene (1:1). *Please call for delivery information.* MW 734.0	10 µCi 50 µCi	702.20 1939.20
156232 **0°C**	L-**α-PHOSPHATIDYLCHOLINE-β-(PYREN-1-YL)HEXANOYL-γ-PALMITOYL** [103625-33-8] $C_{46}H_{68}NO_8P$ MW 794	0.1 mg 0.5 mg 1 mg	74.75 283.00 506.35
158983 **-20-0°C**	**PHOSPHATIDYLETHANOL** (1-Palmitoyl-2-oleoyl-sn-glycero-3-phosphoethanol) **Purity: 98%** Used as a chromatographic standard to assay PLD activity in intact cells via the conversion of phosphatidylcholine to phosphatidylethanol by phospholipase D in the presence of ethanol. **Ref.:** 1. Kobayashi, M. and Kanfer, J.N., J. Neurochem., **48**, 1597 (1987). 2. Gustavsson, L. and Alling, C., Biochem. Biophys. Res. Commun., **142**, 958 (1987). 3. Liscovitch, M., J. Biol. Chem., **264**, 1450 (1989). 4. Pai, J.-K., et al., ibid., **263**, 12472 (1988). MW 703	10 mg 25 mg 50 mg	77.40 184.30 367.40

CATALOG NUMBER			U.S. $
159998 **-20°C**	**PHOSPHODIESTERASE** [9040-59-9] (3′,5′-*cyclic*-Nucleotide phosphodiesterase; Phosphodiesterase 3′,5′-*cyclic*-nucleotide; E.C. 3.1.4.17) **From Bovine Brain** **Activity:** 1-5 units/mg protein. **Unit Definition:** one unit will hydrolyze one µmole 3′,5′-cAMP to 5′-cAMP per minute at pH 7.5, 30°C.	0.25 U 1 U	207.55 527.40
100978 **0°C**	**PHOSPHODIESTERASE I** [9025-82-5] From *Crotalus Adamanteus* Lyophilized in vials containing approximately 5 mg dry wt. and at least 100 units/vial (20-40 units/mg dry wt.) **Unit Definition:** One unit hydrolyzes 1µmole of p-nitrophenyl thymidine-5-phosphate per minute at pH 8.9 and 25°C.	100 U	108.20
100977 **0°C**	**PHOSPHODIESTERASE II** [9068-54-6] **From Bovine Spleen** Lyophilized in vials from 0.001 M sodium pyrophosphate, 10-15 units/vial. **Unit Definition:** One unit is defined as a change in absorbancy of 0.2 at A_{260} at 37°C, pH 6.5 with an RNA substrate.	1 vial	125.70
195707 **0°C**	**PHOSPHOENOLPYRUVIC ACID** [4265-07-0] (2-[Phosphonooxy]-2-propenoic Acid; PEP) **Monopotassium Salt** $C_3H_4O_6PK$ MW 206.1	25 mg 100 mg 250 mg 1 g	11.00 32.80 66.95 236.25
195708 **0°C**	**PHOSPHOENOLPYRUVIC ACID** [53823-68-0] (2-[Phosphonooxy]-2-propenoic Acid; PEP) **Monosodium Salt** **Hydrate** $C_3H_4O_6PNa$ MW 190.0	25 mg 100 mg 250 mg 1 g	11.00 38.75 80.20 282.75
151872 **0°C**	**PHOSPHOENOLPYRUVIC ACID** [5541-93-5] **Trisodium Salt** **Crystalline** **Monohydrate** (PEP) PEP is the primary driving force in many kinase reactions. When coupled with pyruvate kinase, it completes an ATP-regenerating system. $C_3H_2O_6PNa_3 \bullet H_2O$ MW 252	25 mg 100 mg 250 mg 500 mg 1 g 5 g	10.35 14.40 26.55 50.40 89.20 355.60
195684 **-20°C**	**PHOSPHOLIPASE A_2** [9001-84-7] (PLA_2; Phosphatidylcholine 2-Acylhydrolase) From *Apis mellifera* EC 3.1.1.4 Lyophilized **Activity:** 600-1800 units/mg protein **Unit Definition:** one unit will hydrolyze 1 µmol of soybean L-α-phosphatidylcholine to L-α-lysophosphatidylcholine and fatty acid per minute at pH 8.9, 25°C.	500 µg 1 mg	49.85 73.50

CATALOG NUMBER | | | U.S. $

151873
0-5°C
PHOSPHOLIPASE A_2 5 mg 196.40
[9001-84-7] 25 mg 457.00
(Lecithinase-A;
Phosphatide-2-acylhydrolase)
From: Porcine pancreas
E.C.3.1.1.4
Unit Definition: One unit hydrolyzes 1.0 µmole of L-α-phosphatidyl choline to L-α-lysophosphatidyl choline and a fatty acid per minute at a reaction time of 5-10 minutes, pH 8.0 at 40°C.
Supplied as a pale yellow lyophilized powder.
Specific Activity: Minimum 100 IU/mg.
Our phospholipase A_2 is heat stable with an isoelectric point of pH 6.3.
Ref.: Van Deenan, L.L.M.,de Haas, G.H., Biochim. Biophys. Acta, **70**, 538-553 (1963).

159653
0°C
PHOSPHOLIPASE A_2 ACTIVATING PEPTIDE 100 µg 91.70
Glu-Ser-Pro-Leu-Ile-Ala-Lys-Val-Leu-Thr-Thr-Glu-Pro-Pro-Ile-Ile-Thr-Pro-Val-Arg-Arg
This peptide fragment has been shown to activate Phospholipase A_2. The amino acid sequence shows similarity to melittin.
Ref.: Clark, M.A., et al., *Proc. Nat. Acad. Sci. USA*, **88**, 5418 (1991).
MW 2330.8

695001
-20°C
PHOSPHOLIPASE C_γ 100 µg 416.75
MONOCLONAL ANTIBODY
(PLC_γ)
Anti-Bovine
Clone: PLC 3 10
Isotype: purified IgG
Conc/Titer: 1:1,000
Applications: ELISA; Immunoblotting
PLC_γ hydrolyzes phosphatidyl inositol-4-5 biphosphate and diacylglycerol,[1] the former acting as a second messenger in calcium signaling and the latter becoming an activator of protein Kinase C.
A synthetic peptide corresoponding to positions 1040-1057 of the bovine brain enzyme was used as the immunogen.
It is supplied at a concentration of 1 mg/ml in 40% glycerol, 20 mM sodium phosphate, pH 7.5, 150 mM NaCl & 3 mM NaN_3.
Ref: 1. Rhee, S.G., et al., *Science* **244**, 546 (1989).
2. Nishibe, et al., *J. Biol. Chem.* **264**, 10335 (1990).

152354
0°C
PHOSPHOLIPASE C, PHOSPHATIDYLINOSITOL-SPECIFIC 5 U 237.95
(PIPLC)
From *Bacillus thuringiensis*.
This phosphatidylinositol-specific phospholipase C is a phospholipid degradation enzyme which cleaves PI into diglyceride and myo-inositol-cyclic-1,2-phosphate. PIPLC does not act on phosphatidylcholine, phosphatidylethanolamine, phosphatidylglycerol, or sphingomyellin. PIPLC has an optimum pH range of 7.0-8.5, and performs well at temperatures of 30°C to 50°C.
Unit Definition: One unit cleaves 1.0 µmole of phosphatidylinositol per minute into myo-inositol phosphate ester (determined after conversion to inorganic phosphate) at pH 7.5 and 37°C.

CATALOG NUMBER | | | U.S. $

159833
0°C
PHOSPHOLIPASE C, PHOSPHATIDYLINOSITOL-SPECIFIC 5 U 183.45
(PIPLC)
Recombinant
From *B. subtilis*.
This phosphatidylinositol-specific phospholipase C is a recombinant product isolated from *B. subtilis* transfected with the PIPLC gene from *B. thuringiensis*.It is very stable and demonstrates broad specificity, making it useful for the detection of glycosyl-phosphatidylinositol membrane anchors, antibody production, and structure-function studies.
Activity: >500 U/mg protein.
Unit Definition: One unit will hydrolyze 1 µmole of phosphatidylinositol per minute at pH 7.5 and 37 °C.
Ref.: Low, M.G., et al., J. Immunol. Methods, **113**, 101 (1988)

195685
-20°C
PHOSPHOLIPASE C, PHOSPHATIDYLINOSITOL-SPECIFIC 5 U 236.25
[9001-86-9]
(PIPLC)
From *Bacillus cereus*
EC 3.1.4.10
Purity: >95% by SDS-PAGE
Activity: 600 units/mg protein
Unit Definition: one unit will liberate 4 units of glycosyl-PI-anchored acetylcholinesterase per minute at pH 7.4, 37°C.
May be used to release phosphatidylinositol (PI)-linked proteins from membranes.
Supplied in 50 mM TEA, ph 7.5, 10 mM EDTA, 10 mM NaN_3.

195686
-20°C
PHOSPHOLIPASE D 1 KU 29.40
[9001-87-0] 10 KU 266.50
(Phosphatidylcholine Phosphatidohydrolase)
From *Streptomyces sp.*
EC 3.1.4.4
Activity: 24,000 units/mg protein
Unit Definition: one unit will liberate 1 µmol of choline from L-α-phosphatidylcholine per hour at pH 5.6, 37°C.
Also active on other phosphatidyl esters and sphingomyelins.

151876
0-5°C
PHOSPHOMYCIN 1 g 12.85
[26016-99-9] 5 g 38.90
Disodium Salt 10 g 64.85
Antibiotic
$C_3H_5O_4PNa_2$ MW 182

152851
-20-0°C
PHOSPHORAMIDON 0.5 mg 20.85
[119942-99-3] 1 mg 33.70
(N-[α-Rhamnopyranosyl-oxyhydroxyphosphinyl]-Leu-Trp) 5 mg 115.90
Microbial Source
Sodium Salt
Inhibitor for thermolysin and collagenase.
Ref: Suda, H., et al., J. Antibiot., **26**, 621 (1963).
$C_{23}H_{34}N_3O_{10}PNa_2$ MW 588.5

195998
-20°C
PHOSPHORYLASE KINASE 250 U 26.25
[9001-88-1] 1 KU 98.40
(Dephosphophosphorylase Kinase; ATP:phosphorylase b Phosphotransferase)
EC 2.7.1.38
From Rabbit Muscle
Lyophilized
Activity: ~200-500 units/mg protein
Unit Definition: one unit will form 1 µmol of phosphorylase-a from phosphorylase-b per minute at pH 7.7, 30°C in the presence of ATP.

CATALOG NUMBER			U.S. $
691371 0-5°C	**PHOSPHOTYROSINE** *MONOCLONAL ANTIBODY* **Clone:** PY20 **Isotype:** mouse IgG_{2b} **Conc/Titer:** 1 mg/ml Applications: Immunoblotting; ELISA; Immunohistology; Immunoprecipitation	100 µg	280.70
691381 0-5°C	**PHOSPHOTYROSINE** *MONOCLONAL ANTIBODY* **Clone:** PY69 **Isotype:** mouse IgG_{2a} **Conc/Titer:** 1 mg/ml Applications: Immunoblotting; ELISA; Immunohistology; Immunoprecipitation	100 µg	412.75
691501 -20°C	**PHOSPHOTYROSINE** *MONOCLONAL ANTIBODY* **Anti-Phosphotyrosine Clone:** PY20 **Isotype:** mouse IgG_{2b} Applications: Immunoassay. **Biotinylated** This antibody is the same as ICN Code No. 69-137-1 that has been conjugated with biotin. **Conc/Titer:** 1:6,000	100 µg	366.60
691531 -20°C	**PHOSPHOTYROSINE** *MONOCLONAL ANTIBODY* **Anti-Phosphotyrosine Clone:** PY20 **Isotype:** mouse IgG_{2b} Applications: Immunoassay. **FITC Conjugated** This antibody is the same as ICN Code No. that has been conjugated with fluorescein isothiocyanate. **Conc/Titer:** 1:1,000	50 µg	325.50
691511 -20°C	**PHOSPHOTYROSINE** *MONOCLONAL ANTIBODY* **Anti-Phosphotyrosine Clone:** PY20 **Isotype:** mouse IgG_b Applications: Immunoassay. **HRP Conjugated** This antibody is the same as ICN Code No. 69-137-1 that has been conjugated with horseradish peroxidase. Conc/Titer: 1:1,000	100 µg	363.10
153327 0-5°C	**PHYTOLACCA AMERICANA AGGLUTININ** [63231-57-2] (Pokeweed Mitogen) Purified by affinity chromatography Salt and sugar free. **Activity:** <20 µg/ml 10 µg agglutinates fresh human 2% type O erythrocytes in 0.01M PBS, pH 7.45. Exhibits specificity for $(D\text{-}glcNAc)_3$ and demonstrates mitogenic properties at approximately 2.5 µg per ml.	1 mg 5 mg	53.35 208.25
159197 RT	**PICOTAMIDE** [32828-81-2] **Purity: 98%** TxA_2 synthase inhibitor and thromboxane A_2 antagonist. **Ref.:** 1. Modesti, P.A., et al., Eur. J. Pharmacol., **169**, 85 (1989). 2. Berrettini, M., et al., Eur. J. Clin. Pharmacol., **39**, 495 (1990). 3. Numano, F., et al., Thromb. Haem., **62**, 554 (1989). MW 376.2	10 mg 25 mg 50 mg	108.95 258.00 470.10
151889 0°C	**PICROTOXIN** [124-87-8] (Cocculin) **Purity: >98%** A GABA-receptor antagonist. **Ref.:** Soubrie, P., et al., Pharmacol. Biochem., **10**, 463 (1979). $C_{30}H_{34}O_{13}$ MW 602.6	1 g 2 g	36.50 69.20

CATALOG NUMBER			U.S. $
151892 RT	**PILOCARPINE** [54-71-7] **Hydrochloride Crystalline** Parasympathomimetic $C_{11}H_{16}N_2O_2 \bullet HCl$ MW 244.7	1 g 5 g 10 g	17.75 61.60 101.90
151893 RT	**PILOCARPINE** [148-72-1] **Nitrate Crystalline** $C_{11}H_{16}N_2O_2 \bullet HNO_3$ MW 271.3	1 g 5 g 10 g	16.70 55.70 90.60
153787 RT	**PIMOZIDE** [2062-78-4] (1-[1-[4,4-Bis(4-fluorophenyl)butyl]-4-piperidinyl]-1,3-dihydro-2H-benzimidazol-2-one) Calcium channel antagonist $C_{28}H_{29}F_2N_3O$ MW 461.6	25 mg 50 mg 100 mg	14.45 23.95 43.35
159808 RT	**PINACIDIL** [85371-64-8] Antihypertensive and potassium channel activator. $C_{13}H_{19}N_5$ MW 245.3	5 mg 25 mg 100 mg	13.75 43.50 160.55
151895 0-5°C	**PINDOLOL** [13523-86-9] (1-[1H-indol-4-yloxyl]-3-[isopropyl-amino]-2-propanol) A β-adrenergic compound. $C_{14}H_{20}N_2O_2$ MW 248.3	250 mg 1 g 5 g	14.35 33.40 103.40
159652 0°C	**10-[3-(1-PIPERAZINYL)PROPYL]-2-TRIFLUOROMETHYLPHENOTHIAZINE DIMALEATE** Potent inhibitor of protein kinase C. **Ref.:** Aftab, et al., *Mol. Pharm.*, **40**, 798 (1991) $C_{28}H_{26}F_3N_3O_4S$ MW 557.6	5 mg 10 mg 25 mg	52.75 97.80 197.60
153792 RT	**(±)-*cis*-2,3-PIPERIDINE-DICARBOXYLIC ACID** [82949-15-3] NMDA agonist $C_7H_{11}NO_4$ MW 173.2	15 mg 25 mg 50 mg	21.75 32.55 57.80
153790 RT	**PIRENPERONE** [75444-65-4] (3-[2-[4-(4-Fluorobenzoyl)-1-piperidinyl]-ethyl-2-methyl-4H-pyrido[1,2-a]pyrimidin-4-one) 5-HT_2 serotonin antagonist $C_{23}H_{24}FN_3O_2$ MW 393.5	25 mg 50 mg 100 mg	37.95 69.65 126.80
153789 RT	**PIRENZEPINE** [28797-61-7] (5,11-Dihydro-11-[(4-methyl-1-piperazinyl)-acetyl]-6H-pyrido[2,3-b][1,4]benzodiazepin-6-one) **Dihydrochloride** M_1 muscarinic antagonist and anticholinergic $C_{19}H_{21}N_5O_2 \bullet 2HCl$ MW 424.3	100 mg 150 mg 250 mg	19.10 27.35 43.35
156277 0-5°C	**PIROXICAM** [36322-90-4] (4-Hydroxy-2-methyl-3[pyrid-2-yl-carbamoyl]-2H-1,2-benzothiazine 1,1-dioxide) Cyclooxygenase inhibitor $C_{15}H_{13}N_3O_4S$ MW 331.3	1 g 5 g 10 g	17.45 65.90 117.95
	PLATELET ACTIVATING FACTOR C-16 *See*: L-α-Phosphatidylcholine-β-Acetyl-γ-O-Hexadecyl		
	PLATELET ACTIVATING FACTOR C-18 *See*: L-α-Phosphatidylcholine-β-Acetyl-γ-O-Octadecyl		
154253 0-5°C	**PODOPHYLLOTOXIN** [518-28-5] A potent inhibitor of microtubule assembly. **Purity: ≥98%** $C_{22}H_{22}O_8$ MW 414.4	100 mg 500 mg	27.55 115.60

CATALOG NUMBER			U.S. $
196026 **-70°C**	**POLY(ADP-RIBOSE) POLYMERASE** (PARP) **From Bovine** Can be used as a substrate for CPP32 (Apopain) or other proteases such as Granzyme B. Can be automodified with NAD and used as a western blot standard and to synthesize poly(ADP-Ribose) polymer in ELISA assays for autoimmune disease, polymer binding proteins and glycohydrolase assays. Supplied in solution as 1 mg/ml in 50 mM Tris, pH 8.0. MW 116 KDA	100 µg	367.50
100565 **0-5°C**	**POLYMYXIN B SULFATE** [1405-20-5] Aerosporin **Activity:** >6,000 u/mg	1 MU 5 MU 10 MU 25 MU 50 MU	9.85 23.25 40.70 79.50 142.00
194538 **0-5°C**	**POLYMYXIN B SULFATE** [1405-20-5] **Cell Culture Reagent** Aerosporin **Activity:** >6,000 u/mg	1 MU 5 MU	11.55 27.55
193706 **0-5°C**	**POTASSIUM PENTA-CHLORONITROSYLRUTHENIUM** A caged nitrosyl compound that releases NO in 1msec by laser flash photolysis (320 nm). $K_2Ru(NO)Cl_5$ MW 386.5	5 mg 25 mg	40.80 163.15
153781 **0-5°C**	**PRAZOBIND** (1-(4-Amino-6,7-dimethoxy-2-quinazolinyl)-4-(2-bicyclo[2,2,2]octa-2,5-dienylcarbonyl)piperazine) $C_{23}H_{27}N_5O_3$ MW 421.0	10 mg 15 mg 25 mg	204.70 296.40 454.60
153782 **RT**	**PRAZOSIN** [19237-84-4] (1-(3-Amino-6,7-dimethoxy-2-quinazolinyl)-4-(2-furanyl-carbonyl)piperazine hydrochloride) **Hydrochloride** α_1 adrenergic antagonist $C_{19}H_{21}N_5O_4 \bullet HCl$ MW 419.9	25 mg 50 mg 100 mg	26.10 47.70 86.75
156362 **0-5°C**	**5-PREGNEN-3β-OL-20-ONE-16α-CARBONITRILE** [1434-54-4] (Pregnenolone-16α-carbonitrile) **Purity:** Activates the transcription of the PCN1 gene and induces cytochrome P-450 activity. **Ref.:** 1. Hardwick, J.P., et. al., J. Biol. Chem., **258**, 10182 (1983). 2. Watkins, P.B., et. al., Proc. Natl. Acad. Sci. USA, **82**, 6310 (1985). 3. Gonzalez, F.J., et. al., Mol. Cell. Biol., **6**, 2969 (1986). $C_{22}H_{31}NO_2$ MW 341.5	50 mg 100 mg 250 mg	27.60 50.25 114.60
157923 **0°C**	**PRO-ASP-VAL-ASP-HIS-VAL-PHE-LEU-ARG-PHE-AMIDE** [121801-61-4] **From Locust** (*Schistocera gregaria*) FMRF-amide like neuropeptide. **Purity: 97%** MW 1243.4	1 mg 5 mg	68.50 312.55
151949 **-20-0°C**	**PROCTOLIN** [57966-42-4] (Arg-Tyr-Leu-Pro-Thr) An insect neurotransmitter. **Ref.:** 1. Starratt, A.N. and Brown, B.E., Life Sci., **17**,1253 (1976). 2. O'Shea, M., et al., Science, **213**, 567 (1981).	1 mg 5 mg 10 mg 25 mg	30.30 93.30 166.40 362.15
151950 **RT**	**PROGLUMIDE** (4-Benzoylamino-5-dipropylamino-5-oxopentanoic acid sodium salt) **Sodium Salt** Selective cholecystokinin antagonist, water soluble, gastrin receptor antagonist.	100 mg 500 mg	97.60 272.35
193707 **RT**	**PROPOFOL** [2078-54-8] (2,6-Diisopropylphenol) A short acting general anesthetic which exhibits direct activation of the $GABA_A$ receptor and inhibition of glutamate receptor-mediated synaptic transmission. **Ref.:** Orser, et al., Br. J. Pharmacol., **116**, 1761 (1995). $C_{12}H_{18}O$ MW 178.3	1 g 5 g	13.25 39.70
190088	**DL-PROPRANOLOL** [3506-09-0] (1-[Isopropylamino]-3-[1-naphthyloxy]-2-propanol) **Purity: 98%** **Hydrochloride** **Crystalline** A β-adrenergic blocker. Inhibitor of phosphatidate phosphohydrolase blocking PLD derived DAG formation. **Ref.:** 1. Billah, M.M., et al., J. Biol. Chem., **264**, 17069 (1989). 2. Billah, M.C., et al., FEBS Lett, **233**, 153 (1988). 3. Barret, et al., Brit. J. Pharmacol., **34**, 43 (1968). $C_{16}H_{21}NO_2 \bullet HCl$ MW 295.8	1 g 5 g 25 g 100 g	8.90 26.90 101.65 270.00
156412 **0-5°C**	**(R)-(+)-PROPRANOLOL** [13071-11-9] **Hydrochloride** $C_{16}H_{21}NO_2 \bullet HCl$ MW 295.8	100 mg 500 mg	46.80 208.45
156413 **RT**	**(S)-(-)-PROPRANOLOL** [4199-10-4] **Hydrochloride** 5-HT_1 antagonist and β adrenergic blocker $C_{16}H_{21}NO_2 \bullet HCl$ MW 295.8	100 mg 500 mg	60.40 257.25
	PROPYL β-CARBOLINE-3-CARBOXYLATE *See*: β-Carboline-3-carboxylic acid propyl ester		
153773 **0-5°C**	**R(-)-PROPYLNORAPOMORPHINE** [18426-20-5] (R(-)-10,11-Dihydroxy-N-n-propylnoraporphine hydrochloride) **Hydrochloride** D_2 Dopamine receptor agonist $C_{19}H_{21}NO_2 \bullet HCl$ MW 331.8	2 mg 5 mg 10 mg	18.05 36.15 72.25
153777 **0-5°C**	**S(+)-PROPYLNORAPOMORPHINE** (S(+)-NPA) (+)-10,11-Dihydroxy-N-n-propylnoraporphine) **Hydrochloride** $C_{19}H_{21}NO_2 \bullet HCl$ MW 331.8	2 mg 5 mg	115.70 258.35
153779 **0-5°C**	**3-n-PROPYLXANTHINE** [41078-02-8] (Enprofylline) Weak A_1 and A_2 adenosine receptor antagonist $C_8H_{10}N_4O_2$ MW 194.2	25 mg 50 mg 100 mg	19.85 38.70 74.75
153776 **0-5°C**	**9-n-PROPYLXANTHINE** [125833-04-7] $C_8H_{10}N_4O_2$ MW 194.2	25 mg 50 mg 100 mg	26.10 47.70 86.75

Neuroscience

CATALOG NUMBER			U.S. $
193625 0°C	**20S PROTEASOME** **Recombinant** Expressed in *E. coli* A threonine protease with two distinct endopeptidase activities hydrolyzing proteins on the carboxyl side of hydrophobic and acidic amino acid residues (chymotrypsin-like and peptidylglutamyl-peptide hydrolase activities). **Activity:** chymotrypsin-like activity: hydrolysis of Suc-Ala-Ala-Phe-AMC yields 1.2 nmol of 7-amino-4-methylcoumarin (AMC) per minute per mg protein. Petidylglutamyl-peptide hydrolase activity: hydrolysis of CBZ-Leu-Leu-Glu-β-NA yields 8.9 nmol of β-naphthylamine per minute per mg protein. **Unit Definition:** one unit is the amount of enzyme that hydrolyzes one nmol of peptide in one minute at 60°C. **Ref.:** Maupin-Furlow, J.A. and Ferry, J.G., *J. Biol. Chem.*, **270**, 28,617-28,622 (1995).	500 µg	108.95
193626 0°C	**20S PROTEASOME α-SUBUNIT** **Recombinant** From *Methanosarcina thermophila* Expressed in *E. coli* MW ~24 kDa	500 µg	108.95
697501 0°C	**20S PROTEASOME α-SUBUNIT** *POLYCLONAL ANTIBODY* **Anti-Human** **Host:** rabbit **Form:** liquid whole antisera **Conc/Titer:** 1:20,000 Applications: Western Blotting, Immunodetection This antibody is specific for the 20S proteasome α-subunit. It does not cross-react with the β-subunit.	100 µl	86.00
193627 0°C	**20S PROTEASOME β-SUBUNIT** **Recombinant** From *Methanosarcina thermophila* Expressed in *E. coli* MW ~22 kDa	500 µg	108.95
158346 -20°C	**PROTEIN G ANTAGONIST 2** Pyr-Gln-D-Trp-Phe-D-Trp-D-Trp-Met-NH_2 **Purity: 99%** Reversible and competitive inhibitor of G proteins. **Ref.:** Mukai, H., et al., *J. Biol. Chem.*, **267**, 16237 (1992). MW 1093.6	1 mg	137.60
158348 -20°C	**PROTEIN G ANTAGONIST 2A** Arg-Pro-Lys-Pro-Gln-Gln-D-Trp-Phe-D-Trp-D-Trp-Met-NH_2 **Purity: 99%** Reversible and competitive inhibitor of G proteins. **Ref.:** Mukai, H., et al., *J. Biol. Chem.*, **267**, 16237 (1992). MW 1589.3	1 mg	131.90
159656 0-5°C	**PROTEIN KINASE C ACTIVATING PEPTIDE** Fragment 530-558 Leu-Leu-Tyr-Glu-Met-Leu-Ala-Gly-Gln-Ala-Pro-Phe-Glu-Gly-Glu-Asp-Glu-Asp-Glu-Leu-Phe-Gln-Ser-Ile-Met-Glu-His-Asn-Val Activates Protein Kinase C. MW 3355.07	100 µg 1 mg	71.10 418.55
159655 0-5°C	**PROTEIN KINASE C PSEUDOSUBSTRATE** (Protein Kinase C (19-31)) Arg-Phe-Ala-Arg-Lys-Gly-Ala-Leu-Arg-Gly-Lys-Asn-Val MW 1542.8	1 mg	166.25
159658 0-5°C	**PROTEIN KINASE C SUBSTRATE** Lys-Arg-Thr-Leu-Arg-Arg MW 829.1	1 mg 5 mg	44.65 178.85

CATALOG NUMBER			U.S. $
159654 0-5°C	**PROTEIN KINASE $p34^{cdc2}$ SUBSTRATE** Ala-Asp-Ala-Gln-His-Ala-Thr-Pro-Pro-Lys-Lys-Lys-Arg-Lys-Val-Glu-Asp-Pro-Lys-Asp-Phe Synthetic substrate used in studies of Protein Kinase $p34^{cdc2}$. Shows no activity as a substrate for protein kinase C. **Ref.:** Marshak, D.R., et al., J. Cell. Biochem., **45**, 391 (1991). MW 2407.0	1 mg	412.75
159809 0-5°C	**PROTOPINE** [6164-47-2] **Hydrochloride** Inhibits the release of arachidonic acid and Platelet Activation Factor from membrane phospholipids. $C_{20}H_{19}NO_5$ • HCl MW 389.8	5 mg 25 mg 50 mg 100 mg 500 mg	14.70 29.40 42.00 63.00 236.25
102757 0-5°C	**PROTOPORPHYRIN IX** [50865-01-5] **Disodium Salt** **Purity: ~95%** $C_{34}H_{32}N_4O_4Na_2$ MW 606.6	250 mg 1 g 5 g	14.55 39.65 159.80
156424 0-5°C	**PROTOPORPHYRIN IX DIMETHYL ESTER** [5522-66-7] **From Ox Hemin** **Purity: 95%** **Crystalline** Purity based on $E^{1\%}_{407}$ = 2.89 X 10^3 in $CHCl_3$ $C_{36}H_{38}N_4O_4$ MW 590.7	25 mg 100 mg 500 mg	16.85 45.50 218.10
159830 -20°C	**PTIO** (2-Phenyl-4,4,5,5-tetra-methylimidazoline-1-oxyl-3-oxide) **Purity: ≥ 96%** A stable nitric oxide (NO) scavenger. **Ref.:** Maeda, H., et al., Jpn. J. Cancer Res., **85**, 331 (1994). *Also see Carboxy-PTIO.* $C_{13}H_{17}N_2O_2$ MW 233.3	10 mg 25 mg 100 mg	27.50 37.70 146.00
100552 0°C	**PUROMYCIN** [58-58-2] **Dihydrochloride** **Crystalline** Antimicrobial Causes premature chain termination in protein synthesis, and is an inhibitor of aminopeptidase and enkephalinase. **Ref.:** 1. Reboud, A.M., et al., Biochemistry, **20**, 5281 (1981); 2. Pekarek, J., et al., Immunology, **31**, 773 (1976). $C_{22}H_{29}N_7O_5$ • 2HCl MW 544.4	10 mg 25 mg 100 mg 250 mg 500 mg 1 g	13.55 29.15 103.65 225.90 413.85 760.35
194539 0°C	**PUROMYCIN** [58-58-2] **Cell Culture Reagent** **Dihydrochloride** **Crystalline** Antimicrobial Causes premature chain termination in protein synthesis, and is an inhibitor of aminopeptidase and enkephalinase. **Ref.:** 1. Reboud, A.M., et al., Biochemistry, **20**, 5281 (1981); 2. Pekarek, J., et al., Immunology, **31**, 773 (1976). $C_{22}H_{29}N_7O_5$ • 2HCl MW 544.4	10 mg 25 mg 100 mg	15.95 31.95 121.25
100441 RT	**PUTRESCINE** [110-60-1] (1,4-Diaminobutane) **Free Base** **Purity: ~98%** $C_4H_{12}N_2$ MW 88.15	1 g 5 g 25 g 100 g	5.00 7.10 24.45 71.20
16015 0-5°C	**PUTRESCINE [1,4-^{14}C]** **Dihydrochloride** Sp. Act. 100-120 mCi/mmol 3.70-4.44 GBq/mmol 0.01N HCl solution. *Please call for delivery information.* $NH_2CH_2(CH_2)_2CH_2NH_2$ • HCl MW 161.1	50 µCi 250 µCi 1 mCi	204.95 605.15 1696.65

CATALOG NUMBER			U.S. $
16016 **0-5°C**	**PUTRESCINE [2,3-^{14}C]** **Dihydrochloride** Sp. Act. 100-120 mCi/mmol 3.70-4.44 GBq/mmol 0.01N HCl solution. *Please call for delivery information.* $NH_2CH_2(CH_2)_2CH_2NH_2 \bullet HCl$ MW 161.1	50 µCi 250 µCi 1 mCi	314.10 677.95 1817.90
26047 **0-5°C**	**PUTRESCINE [2,3-^{3}H(N)]** **Dihydrochloride** Sp. Act. 60-120 Ci/mmol 2.22-4.44 TBq/mmol 0.01N HCl solution. *Please call for delivery information.* $NH_2CH_2(CH_2)_2CH_2NH_2 \bullet HCl$ MW 161.1	1 mCi 5 mCi	386.85 1029.65
100450 **RT**	**PUTRESCINE** [333-93-7] (Diaminobutane dihydrochloride) **Dihydrochloride** **Crystalline** **Purity: ~98%** $C_4H_{12}N_2 \bullet 2HCl$ MW 161.1	1 g 5 g 25 g 100 g	5.30 8.15 36.85 120.50
158985 **-20-0°C**	**PYRENYLMETHYL OKADAATE** **Purity: ≥98%** (HPLC) A fluorescent derivative of okadaic acid used as a standard in okadaic acid analysis. $C_{61}H_{78}O_{13}$ MW 1019.3	10 µg 25 µg 50 µg 100 µg	77.50 155.30 279.05 502.90
193422 **RT**	**PYRIDOSTIGMINE BROMIDE** [101-26-8] (3-Dimethylaminocarbonyloxy-N-methylpyrid inium bromide) $C_9H_{13}BrN_2O_2$ MW 261.1	1 g 5 g 25 g	19.70 66.15 220.70
156458 **RT**	**N,N,N′,N′,-*tetrakis*(2-PYRIDYL-METHYL)ETHYLENEDIAMINE** [16858-02-9] (TPEN) **Purity: 98%** Intracellular Zn^{2+} chelator with low affinity for $Mg^{2+}$and Ca^{2+}. Used with QUIN 2 to measure free Ca^{2+} in cells. $C_{26}H_{28}N_6$ MW 424.5	50 mg 100 mg 500 mg	55.90 100.40 397.95
190043 **RT**	**PYRILAMINE MALEATE** [59-33-6] (Mepyramine maleate) **Crystalline** H_1 Histamine antagonist $C_{17}H_{23}N_3O \bullet C_4H_4O_4$ MW 401.5	5 g 25 g 100 g	8.45 27.25 74.75
158544 **RT**	**L-*trans*-PYRROLIDINE-2,4-DICARBOXYLIC ACID** [64769-66-0] **Purity: 98%** Selectively and potently inhibits the uptake of glutamate. **Ref.:** 1. Bridges, R.J., et al., *J. Med. Chem.*, **34**, 717 (1991). 2. Balcar, V.J., et al., *FEBS Lett.*, **300**, 203 (1992). MW 159.1	5 mg 10 mg 25 mg	72.75 120.00 284.00
156470 **0-5°C**	**PYRROLIDINEDITHIOCARBAMATE** [5108-96-3] (APDC; APDTC: Ammonium pyrrolidinedithiocarbamate) **Ammonium Salt** **Purity: 99%** **Crystalline** $C_5H_9NS_2 \bullet NH_3$ MW 164.3	25 g 100 g	25.30 91.55

-Q-

158986 **RT**	**QUAZINONE** [70018-51-8] (Ro 136438) **Purity: 98%** Potent inhibitor of cGMP-inhibited phosphodiesterase. **Ref.:** Holck, M., et al., J. Cardiovasc. Pharmacol., **6**, 520 (1984). $C_{11}H_{10}N_3OCl$ MW 235.7	10 mg 25 mg 50 mg	64.70 156.75 303.50
152003 **RT**	**QUERCETIN** [6151-25-3] (3,3′,4′,5,7-Pentahydroxyflavone) **Dihydrate** **Crystalline** Inhibitor of protein tyrosine kinases. $C_{15}H_{10}O_7 \bullet 2H_2O$ MW 338.3	10 g 25 g 100 g	10.10 20.25 62.75
190090 **0°C**	**QUIN 2** [73630-23-6] (2-[(2-bis-[Carboxymethyl]amino-5-methylphenoxy)methyl]-6-methoxy-8-bis[carboxymethyl] aminoquinoline) Fluorescent probe for calcium. Calcium specific chelator and indicator that causes a shift in UV spectrum upon binding to calcium, and enhances fluorescence. **Ref.:** Tsien, R.Y., et al., J. Cell Biol., **94**, 325 (1982). $C_{26}H_{27}N_3O_{10}$ MW 541.5	10 mg 50 mg	112.15 376.75
190051 **RT**	**QUIN 2-AM** [83104-85-2] (2-[(2-bis-[Carboxymethyl]amino-5-methylphenoxy)methyl]-6-methoxy-8-bis-[carboxymethyl]amino-quinolinetetrakis[acetoxymethyl]ester) Useful as a fluorescent calcium ion buffer and indicator. **Ref.:** Tsien, R.Y., et al., J. Cell Biol., **94**, 325 (1982). $C_{38}H_{43}N_3O_{18}$ MW 829.8	5 mg 10 mg 25 mg 50 mg	69.20 123.95 281.65 538.75
152004 **RT**	**QUINACRINE** [69-05-6] **Dihydrochloride** **Crystalline** **Dihydrate** Fluorescent probe with acetylcholine-activated synaptic membranes. Also a monoamine oxidase inhibitor. $C_{23}H_{30}ClN_3O \bullet 2HCl \bullet H_2O$ MW 490.9	25 g 100 g	27.75 77.00
26048 **0-5°C**	**QUINIDINE [9-^{3}H]** Sp. Act. 10-20 Ci/mmol 370-740 GBq Ethanol solution *Shipped in Dry Ice.* *Please call for delivery information.* MW 324.4	250 µCi 1 mCi	702.20 1454.10
102791 **RT**	**QUINIDINE SULFATE** [6591-63-5] **Crystalline** A sodium channel blocker. $(C_{20}H_{24}N_2O_2)_2 \bullet H_2SO_4$ MW 746.9	10 g 25 g 50 g	30.05 66.30 125.05
102792 **RT**	**QUININE** [6119-70-6] **Hemisulfate** **Crystalline** **Purity: 90-95%** A potassium channel blocker. $C_{20}H_{24}N_2O_2 \bullet 1/2H_2SO_4$ MW 373.5	10 g 25 g 50 g 100 g	14.30 31.55 45.65 82.70
26045 **0-5°C**	**L-QUINUCLIDINYL BENZILATE, [Benzylic-4,4′-^{3}H(N)]** (QNB) Sp. Act. 30-60 Ci/mmol 1.11-2.22 TBq Ethanol solution *Shipped with Dry Ice.* *Please call for delivery information.* MW 337.4	250 µCi 1 mCi	605.15 1393.45
153697 **0-5°C**	**RS(±)-QUINUCLIDINYL BENZILATE** [6581-06-2] ((±)-QNB; (±)-Quinuclidinyl-(RS)-α-hydroxydiphenylacetate) A muscarinic antagonist. $C_{21}H_{23}NO_3$ MW 337.4	1 mg 5 mg 10 mg	31.30 73.35 132.45

CATALOG NUMBER			U.S. $
158987 0°C	**QUIPAZINE** [4774-24-7] **Dimaleate Salt** **Purity: 98%** 5-HT_3 agonist. **Ref.:** Glennon, R.A., et al., J. Med. Chem., **29**, 2375 (1986). $C_{13}H_{15}N_3 \bullet 2C_4H_4O_4$ MW 445.4	50 mg 100 mg 250 mg	91.70 174.85 418.55
159791 RT	**QUISQUALAMINE** [68373-11-5] Exhibits activity at $GABA_A$ receptors. $C_4H_7N_3O_3$ MW 145.1	1 mg 5 mg	30.95 123.80
153771 0-5°C	**(+)-QUISQUALIC ACID** [52809-07-1] **Synthetic** A glutamate agonist. $C_5H_7N_3O_5$ MW 189.1	2 mg 5 mg	101.25 202.45
193948 -20°C	**QX-314** A quarternary lidocaine derivative which acts as a local anesthetic. It is a strong inhibitor of intracellular voltage-sensitive sodium ion conductance. **Ref.:** Conners, et al., J. Pharmacol. Exp. Ther., **220**, 476 (1982). MW 343.3	500 mg 1 g	203.95 358.30

-R-

R 11302

See: Haloperidol Metabolite III

R 59022

See: Diacylglycerol Kinase Inhibitor I

R 59949

See: Diacylglycerol Kinase Inhibitor II

153563 RT	**RANITIDINE** [66357-35-5] (N-[2-[[[5-[(Dimethylamino)methyl]-2-furanyl]methyl]thio]-ethyl]-N′-methyl-2-nitro-1,1-ethenediamine) **Hydrochloride** H_2 Histamine receptor antagonist $C_{13}H_{22}N_4O_3S \bullet HCl$ MW 350.9	1 g 5 g	65.10 130.15
159346 -20-0°C	**RAPAMYCIN** [53123-88-9] **Purity: >98%** by TLC Yellowish solid Soluble in DMSO. Has been shown to selectively block signaling, leading to the activation of P70 S6 kinase. **Ref.:** Terada, N., et.al., J. Biol. Chem., **268**, 12062 (1993). Price, D.J., et.al., Science, **257**, 973 (1992). $C_{51}H_{79}NO_{13}$ MW 914.2	100 µg 1 mg	55.60 171.20
153772 RT	**RAUWOLSCINE** [6211-32-1] ((α-Yohimbine; 17α-Hydroxy-20α-yohimban-16β-carboxylic acid methyl ester) **Hydrochloride** An α_2-adrenergic antagonist. $C_{21}H_{26}N_2O_3 \bullet HCl$ MW 390.9	25 mg 50 mg 100 mg	21.75 36.15 65.10
152015 RT	**REACTIVE BLUE 2** [12236-82-7] (Procion Blue HB) C.I. 61211 **Dye Content: Approx. 60%** An inhibitor of ATP-activated channels. $C_{29}H_{17}ClN_7O_{11}S_3Na_3$ MW 840.1	25 g 100 g 500 g	17.50 47.70 181.00
193711 RT	**REMOXIPRIDE** [73220-03-8] **Hydrochloride** A dopamine D_2 receptor antagonist. $C_{16}H_{23}N_2O_3Br \bullet HCl$ MW 407.8	5 mg 25 mg	62.85 251.35
196052 -20°C	**RESEVERATROL** [501-36-0] (*trans*-3,4′,5-Trihydroxystilbene) **Purity: ≥98%** Present in wine and grapes and found to reduce serum lipids, inhibit platelet aggregation and act as a chemopreventative agent and antioxidant. **Ref.:** Jang, M., et al., Science, **275(5297)**, 218-220 (1997). $C_{14}H_{12}O_3$ MW 228.2	5 mg 25 mg 100 mg	10.50 24.15 74.80
156505 -20°C	**RESINIFERATOXIN** [57444-62-9] From *Euphorbia poisonii* **Purity: 95%** Diterpene ester related to phorbol[1] but apparently not tumorigenic.[2] **Ref.:** 1. Sorg, B., et al., J. Nat. Prod., **45**, 347 (1982). 2. Hergenhahn, M., et al., J. Cancer Res. Clin. Oncol., **108**, 98 (1984). $C_{37}H_{40}O_9$ MW 628.7	100 µg 1 mg	55.50 128.00
159661 0-5°C	**RESINIFERONOL 9,13,14-ORTHOPHENYLACETATE** [57852-42-3] (ROPA) **Purity: 98%** Binds to Protein Kinase C, but is not active as a Capsaicin analog. Useful for synthesizing Resiniferatoxin analogs. $C_{28}H_{32}O_6$ MW 464.6	1 mg 5 mg	87.00 400.00
158990 -20-0°C	**RESMETHRIN** [10453-86-8] Mixture of isomers A class Type I pyrethrin that is weakly active and acts as a "negative" control for the inhibition of calcineurin (protein phosphatase 2B) by Type II pyrethrins. $C_{22}H_{26}O_3$ MW 391.3	10 mg 25 mg 50 mg	42.00 98.00 176.00
195490 0°C	**RIFAMPIN** [13294-46-1] (Rifampicin) A rifamycin which specifically inhibits DNA-dependent bacterial RNA Polymerase. Mammalian RNA polymerase is not affected. **Ref.:** Wehrli, et al., Proc. Natl. Acad. Sci., **61**, 667 (1968). $C_{43}H_{58}N_4O_{12}$ MW 823	100 mg 250 mg 1 g 5 g 25 g	5.80 11.40 31.80 122.90 493.60
193712 RT	**RILMENIDINE** **Hemifumarate** An I_1-imidazoline binding site ligand and α_2-adrenoceptor agonist. Exhibits higher I_1 vs. α_2 selectivity than clonidine. $C_{10}H_{16}N_2O \bullet 1/2C_4H_4O_4$ MW 238.3	5 mg 25 mg	62.85 251.35
193713 RT	**RILUZOLE** [1744-22-5] (2-Amino-6-trifluoro-methoxybenzothiazole) A glutamate release inhibitor which also blocks voltage-dependent Na^+ channels and inhibits GABA uptake. **Ref.:** Mantz, et al., Eur. J. Pharmacol., **257**, R7 (1994). $C_8H_5N_2OSF_3$ MW 234.2	10 mg 50 mg	24.25 97.00
193714 RT	**RISPERIDONE** [106266-06-2] Both a D_2 dopamine and 5-HT_2 serotonin receptor antagonist. $C_{23}H_{27}N_4O_2F$ MW 410.5	5 mg 10 mg	77.15 138.90
153769 RT	**RITANSERIN** [87051-43-2] (6-[2-[4-[*bis*(4-Fluorophenyl)-methylene]-1-piperidinyl]-ethyl]-5H-thiazolo[3,2-a]pyrimidin-5-one) 5-HT_2/5-HT_{1C} serotonin antagonist $C_{27}H_{25}F_2N_3OS$ MW 477.6	25 mg 50 mg 100 mg	85.30 120.15 227.65

CATALOG NUMBER			U.S. $
	Ro 13-5057 *See*: Aniracetam		
	Ro 16-6491 *See*: N-(2-Aminoethyl)-4-chlorobenzamide		
159810 **0-5°C**	**ROLIPRAM** [61413-54-5] (4-[3-(Cyclopentyloxy)-4-methoxyphenyl]-2-pyrrolidinone) **Purity: ≥98%** cAMP-specific phosphodiesterase inhibitor, selective for phosphodiesterase IV. **Ref.:** Imanishi, T., et al., Eur. Jour. of Pharmacol., **321(3)**, 273-278 (1997). $C_{16}H_{21}NO_3$ MW 275.4	1 mg 5 mg 10 mg	18.25 40.50 62.30
159792 **RT**	**ROSMARINIC ACID** $C_{18}H_{16}O_8$ MW 360.3	5 mg 10 mg 50 mg	20.65 35.80 143.30
156565 **RT**	**RUTHENIUM RED** [11103-72-3] (Ruthenium oxychloride ammoniated) **Tetrahydrate** **Dye Content: Approx. 20%** A Ca^{2+} antagonist $Ru_3Cl_6H_{42}N_{14}O_2 \bullet 4H_2O$ MW 858.4	250 mg 1 g 5 g	32.75 130.00 648.00
195710 **RT**	**RYANODINE** [15662-33-6] (Ryanadol;3-(1H-pyrrole-2-carboxylate) From *Ryania speciosa vahl* A mixture of ryanodine and 9,21-dehydroryanodine (1:1). $C_{25}H_{35}NO_9$ MW 493.5	5 mg 25 mg	29.10 144.00
153770 **RT**	**RYANODINE** [15662-33-6] (Ryanadol;3-(1H-pyrrole-2-carboxylate) From *Ryania speciosa vahl* Inhibits calcium release from the sarcoplasmic reticulum. $C_{25}H_{35}NO_9$ MW 493.5	1 mg 2 mg 5 mg	63.50 114.40 270.90
	RYANODINE, 9,21-DEHYDRO *See*: 9,21-Dehydroryanodine		
	-S-		
	SACLOFEN *See*: 3-Amino-2-(4-chlorophenyl)propanesulfonic acid		
156581 **RT**	**SANGUINARINE CHLORIDE** [5578-73-4] Sodium, potassium and magnesium-ATPase inhibitor $C_{20}H_{14}NO_4Cl$ MW 367.8	5 mg 25 mg	27.90 92.15
	SC-9 *See*: 5-Chloro-N-(6-phenylhexyl)-1-naphthalenesulfonamide		
	SC-10 *See*: 5-Chloro-N-Heptylnaphthalene-1-sulfonamide		
153560 **0-5°C**	**(-)-SCOPOLAMINE Hydrobromide** A cholinergic antagonist. $C_{17}H_{21}NO_4 \bullet HBr$ MW 384.3	1 g 5 g	43.35 130.15
153561 **0-5°C**	**(-)-SCOPOLAMINE n-BUTYL BROMIDE** [149-64-4] A cholinergic antagonist. $C_{21}H_{30}BrNO_4$ MW 440.4	1 g 5 g	43.35 130.15
153562 **RT**	**(-)-SCOPOLAMINE METHYL BROMIDE** [155-41-9] (Methscopolamine bromide) A cholinergic antagonist. $C_{18}H_{24}BrNO_4$ MW 398.3	250 mg 1 g	28.85 57.80
102864 **RT**	**SEMICARBAZIDE** [563-41-7] (Aminourea hydrochloride) **Hydrochloride** **Crystalline, 99%** Urease substrate and MAO inhibitor $CH_5N_3O \bullet HCl$ MW 111.5	100 g 500 g	10.90 50.00
159813 **-20°C**	**L-SEPIAPTERIN** [17094-01-8] Sepiapterin is converted intracellularly into tetrahydrobiopterin, which causes stimulation of NO production. **Ref.:** Gross, S.S. and Levi, R.J., J. Biol. Chem., **267**, 25722 (1992). $C_9H_{11}N_5O_3 \bullet 2H_2O$ MW 273.2	1 mg 5 mg	29.80 119.20
	SEROTONIN *See*: 5-Hydroxytryptamine		
193598 **0-5°C**	**SEROTONIN ELISA KIT** This Serotonin ELISA kit provides materials for the quantitative determination of chemically derivited serotonin in serum, plasma, urine, tissue homogenates, and cell culture supernatants. The assay procedure follows the basic principle of competitive ELISA whereby there is competition between a biotinylated and non-biotinylated antigen for a fixed number of antibody binding sites. The kit is a 12 x 8 format. *FOR RESEARCH USE ONLY!*	1 each	558.40
159831 **-20°C**	**SIN-1** [16142-27-1] (3-Morpholinosydnonimine) **Hydrochloride** **Purity: ≥98%** A nitric oxide (NO) donor. SIN-1 is a metabolite of molsidomine and spontaneously decomposes to nitric oxide and superoxide anion radicals. **Ref.:** 1. Hess, D.T., et al., Nature, **366**, 562 (1993). 2. Mery, P.-F., et al., J. Biol. Chem., **268**, 26286 (1993). $C_6H_{10}N_4O_2 \bullet HCl$ MW 206.7	5 mg 10 mg 25 mg	32.05 57.35 114.65
	SIN-10 *See*: Molsidomine		
159202 **RT**	**SK & F 525A** [62-68-0] (Proadifen) **Hydrochloride** **Purity: 99%** Inhibits cytochrome P^{450}. $C_{23}H_{31}NO_2 \bullet HCl$ MW 389.9	250 mg 1 g	103.20 366.90
159775 **0-5°C**	**SK & F 91488** [68643-23-2] (4-[N,N-Dimethylamino]butylisothiourea dihydrochloride) A Dimaprit homologue. Strong inhibitor of histamine N-methyltransferase. $C_7H_{17}N_3S \bullet 2HCl$ MW 248.2	1 mg 5 mg 25 mg	13.75 42.40 169.70
158992 **RT**	**SK & F 96365** (1-[β-[3-(4-Methoxyphenyl)propoxy]-4-methoxyphenethyl]-1H-imidazole) **Hydrochloride** **Purity: 98%** Specifically inhibits receptor-mediated calcium entry in platelets, neutrophils, and endothelial cells. **Ref.:** 1. Merrit, J.E., et al., Biochem. J., **271**, 515 (1990). 2. Fasolato, C., et al., J. Biol. Chem., **265**, 20351 (1990). 3. Blayney, L.M., et al., Biochem. J., **273**, 803 (1991). 4. Chan, J. and Greenberg, D.A., Biochem. Biophys. Res. Commun., **177**, 1141 (1991). $C_{22}H_{26}N_2O_3 \bullet HCl$ MW 402.9	5 mg 10 mg 25 mg	109.20 215.00 535.00

CATALOG NUMBER			U.S. $
158830 RT	**SK & F 97541** [127729-35-5] (3-Aminopropyl-(methyl)phosphonic acid) **Purity: ≥98%** $GABA_B$ agonist, 10 fold more potent than baclophen. **Ref:** 1. Seabrook, G.R., et al., Brit. Jour. of Pharmacol., **101(4)** 949-957 (1990). 2. Saccomano, N.A., et al., Annu. Rev. Med. Chem., **24** 287 (1989). $C_{11}H_{11}NO_4$ MW 137.1	5 mg 25 mg	95.00 395.00
152061 RT	**SODIUM NITROPRUSSIDE** [13755-38-9] (Sodium nitroferricyanide) **Crystalline** Reagent used for chromatographic detection of peptides containing cystine. Also liberates nitric oxide in biological systems. $Na_2Fe(CN)_5NO$ MW 261.9	25 g 100 g 250 g 500 g	12.65 38.50 85.50 143.85
159664 RT	**SODIUM ORTHOVANADATE** [13721-39-6] (Decavanadate) **Purity: 96% min.** **Powder** Potent alkaline phosphate inhibitor. Na_3VO_4 MW 183.9	10 g 25 g 100 g	13.20 25.25 91.70
193715 RT	**SOTALOL** [3930-20-9] **Hydrochloride** A potent β-adrenergic antagonist. $C_{12}H_{20}N_2O_3S \bullet HCl$ MW 272.4	5 mg 25 mg	40.80 163.15
158736 -20°C	**SPANTIDE II** (N-ε-Nicotinoyl-D-Lys-Pro-3-Pyridyl-Ala-Pro-D-Cl_2-Phe-Asn-D-Trp-Phe-D-Trp-Leu-Nle-NH_2 **Purity: >97%** Potent Substance P antagonist. **Ref.:** Folkers, K., et al., *Amino Acids*, **5**, 233 (1993). MW 1670.2	1 mg	172.00
158993 0-5°C	**SPECTINOMYCIN** (U 18409E, antibiotic) **Sulfate** **Purity: 98%** $C_{14}H_{24}N_2O_7 \bullet H_2SO_4$ MW 430.4	1 g 2 g 5 g	13.75 22.95 52.15
152068 0-5°C	**SPERMIDINE** [124-20-9] (N-[3-Aminopropyl]-1,4-butanediamine) **Free Base** **Purity: ~99%** $C_7H_{19}N_3$ MW 145.2	1 g 5 g 25 g	17.20 53.75 200.75
100472 0°C	**SPERMIDINE** [334-50-9] **Trihydrochloride** **Crystalline** **Purity: 99%** Forms stable compounds with nucleic acids. $C_7H_{19}N_3 \bullet 3HCl$ MW 254.6	1 g 5 g 25 g	13.20 37.00 145.00
26049 0-5°C	**SPERMINE, [Terminal Methylene-^{3}H]** **Tetrahydrochloride** Sp. Act. 30-60 Ci/mmol 1.11-2.22 TBq Ethanol:water solution (9:1). *Please call for delivery information.* $NH_2CH_2(CH_2)_2NH(CH_2)_4NH(CH_2)_2CH_2NH$ MW 348.2	1 mCi 5 mCi	787.10 2666.85
100474 0°C	**SPERMINE** [306-67-2] **Tetrahydrochloride** **Crystalline** **Purity: 96-98%** $C_{10}H_{26}N_4 \bullet 4HCl$ MW 348.2	1 g 5 g	18.00 175.00

CATALOG NUMBER			U.S. $
193716 -20°C	**SPERMINE *bis*(NITRIC OXIDE)ADDUCT** [136587-13-8] (Spermine NONOate; SPER/NO; (Z)-1-[N-(3-Ammoniopropyl)-N-[4-(3-aminopropylammonio)butyl]amino]-diazen-1-ium-1,2-diolate) **Purity: ≥98%** A nitric oxide donor that releases nitric oxide (NO) into aqueous solutions. **Ref.:** Keefer, L.K., et al., Methods in Enzymol., **268**, 281-293 (1996). $C_{10}H_{26}N_6O_2$ MW 262.4	1 mg 5 mg 25 mg	10.50 26.25 99.75
102945 0°C	**SPHINGOMYELIN** [85187-10-6] **From Bovine Brain** **Purity: ~99%** White powder Primarily contains stearic and nervonic acids. Used in the preparation of vesicles. **Ref.:** Parmar, Y.I., et al., J. Am. Chem. Soc., **106**, 2434 (1984).	5 mg 10 mg 50 mg 100 mg 500 mg	8.25 11.70 33.30 65.00 320.00
16025 0-5°C	**SPHINGOMYELIN [Choline Methyl-^{14}C]** **From Bovine** Sp. Act. 50-60 mCi/mmol 1.85-2.22 GBq/mmol Toluene:methanol (1:1) solution. *Please call for delivery information.*	10 µCi 25 µCi	1068.20 2363.65
26053 0-5°C	**SPHINGOMYELIN [Choline Methyl-^{3}H]** **From Bovine** Sp. Act. 60-90 Ci/mmol 2.22-3.33 TBq/mmol Toluene:methanol (1:1) solution. *Please call for delivery information.*	50 µCi	1068.20
159665 0°C	D-*erythro*-**SPHINGOSINE** [123-78-4] (Cerebroside) **Synthetic** Inhibits Protein Kinase C and calmodulin-dependent enzymes. $C_{18}H_{37}NO_2$ MW 299.5	1 mg 5 mg 25 mg	13.75 44.65 145.00
26050 0-5°C	D-*erythro*-**SPHINGOSINE, [3-^{3}H]** Sp. Act. 15-30 Ci/mmol 0.555-1.11 TBq/mmol Ethanol solution Shipped with Dry Ice. Please call for delivery information. MW 299.5	50 µCi 250 µCi	726.45 1817.90
158737 -20°C	**SPHINGOSINE-1-PHOSPHATE** [26993-30-6] **Purity: 98%** A second messenger which mobilizes calcium from intracellular stores. Phospholipase D activator and inhibitor of tumor cell motility and invasiveness. Growth promoter of quiescent Swiss 3T3 fibroblasts. **Ref.:** 1. Mattie, M., et al., *J. Biol. Chem.*, **269**, 3181 (1994). 2. Desai, N.N., et al., *J. Biol. Chem.*, **267**, 23122 (1992). 3. Sadahira, Y., et al., *Proc. Natl. Acad. Sci. USA*, **89**, 9686 (1992). MW 379.5	1 mg	119.00
158738 -20°C	**SPHINGOSYLPHOSPHORYLCHOLINE** [1670-26-4] **Purity: 98%** Calcium release inducer. **Ref.:** Yule, D.I., et al., *J. Biol. Chem.*, **268**, 12353 (1993). $C_{23}H_{49}N_2O_5P$ MW 464.6	10 mg	155.00

CATALOG NUMBER			U.S. $
152072 **0-5°C**	**SPIPERONE** [749-02-0] (Spiropitan; 4-Phenyl-8-[3-(4-fluorobenzoyl)propyl]-1-oxo-2,4,8-triazaspiro[4,5]decane) Selective antagonist for dopamine D_2 receptor. $C_{23}H_{26}FN_3O_2$ MW 395.5	100 mg 250 mg	32.00 62.00
153767 **RT**	**SPIPERONE** [749-02-0] (Spiroperidol; 8-[4-(4-Fluorophenyl)-4-oxobutyl]-1-phenyl-1,3,8-triazaspirol[4,5]decan-4-one) **Hydrochloride** Selective antagonist for dopamine D_2 receptor. $C_{23}H_{26}FN_3O_2 \bullet HCl$ MW 431.9	25 mg 50 mg 100 mg	21.75 36.15 65.10
152404 **0-5°C**	**SPIROXATRINE** [1054-88-2] ((±)-8-[(2,3-Dihydro-1,4-Benzodioxin-2-yl)Methyl]-1-Phenyl-1,3,8-Triazaspiro [4,5]Decan-4-one) A neuroleptic agent for receptor studies. Spiroxatrine has been shown to exhibit high affinity to 5-HT_{1A} binding receptor sites, and moderate affinity to 5-HT_{1B} and 5-HT_2 binding receptor sites. Spiroxatrine has also been shown to exhibit high affinity to dopamine-D_2 and μ-opiate receptors. $C_{23}H_{25}N_3O_3$ MW 379.5	1 mg 5 mg 25 mg	13.90 31.25 140.75
193717 **RT**	**SQ 22,536** [17318-31-9] (9-(Tetrahydro-2-furanyl)-9H-purin-6-amine) An adenylate cyclase inhibitor. $C_9H_{11}N_5O$ MW 205.2	1 mg 5 mg	27.55 110.25
193718 **-20°C**	**SQ 29,548** [98672-91-4] Potent, selective thromboxane A_2 receptor antagonist. $C_{21}H_{29}N_3O_4$ MW 387.5	1 mg 5 mg	66.15 264.60
191400 **0-5°C**	**STAUROSPORINE** [62996-74-1] From *Streptomyces sp.* Found to inhibit phospolipid/Ca^{2+} dependent and cyclic nucleotide dependent protein kinases. A potent protein kinase inhibitor ueful as a tool for studies on protein phosphorylation in the regulation of cellular functions. $C_{28}H_{26}N_4O_3$ MW 466.5	100 µg 500 µg 1 mg	65.05 243.05 452.90
194805 **0-5°C**	**STAUROSPORINE** [62996-74-1] (Antibiotic AM-2282) From *Streptomyces sp.* **Molecular Biology Reagent** **Purity: ≥98%** Inhibitor of phospolipid/Ca^{2+} dependent and cyclic nucleotide dependent protein kinases. A potent protein kinase C inhibitor and useful as a tool for studies on protein phosphorylation in the regulation of cellular functions. $C_{28}H_{26}N_4O_3$ MW 466.5	100 µg 500 µg 1 mg	77.70 259.10 468.55
158994 **-20-0°C**	**1-STEAROYL-2-ARACHIDONOYL-sn-GLYCEROL** [65914-84-3] (C18:0/C20:4,[cis,cis,cis,cis]-5,8,11,14; 1-octadecanoyl-2-[(cis,cis,cis,cis)-5,8,11,14-eicosatetraenoyl]-sn-glycerol) **Purity: 98%** Protein kinase C activator **Ref.:** Go, M., et.al., ibid., **144**, 598 (1987). $C_{41}H_{72}O_5$ MW 645	2 mg 5 mg 10 mg 25 mg	17.50 41.00 68.00 153.00
158995 **-20°C**	**1-STEAROYL-2-LINOLEOYL-sn-GLYCEROL** **Purity: 98%** Protein kinase C activator. **Ref.:** Go, M., et.al., ibid., **144**, 598 (1987). $C_{39}H_{72}O_5$ MW 621	20 mg 50 mg 100 mg	110.10 263.70 504.50
158996 **0-5°C**	**STREPTOLYDIGIN** [7229-50-7] (U 5481) **Purity: 98%** Active against a number of gram positive bacteria. Inhibits the assembly of the RNA polymerase II transcription complex and DNA polymerase III transcription. **Ref.:** 1. Logan, K., et al., DNA, **8**, 595 (1989). 2. Logan, K. and Ackerman, S., DNA, **7**, 483 (1988). $C_{32}H_{44}N_2O_9$ MW 600.7	1 mg 5 mg 10 mg	13.65 43.00 81.40
100556 **0-5°C**	**STREPTOMYCIN** [3810-74-0] **Sulfate Salt** White powder Inhibits initiation and causes misreading of rRNA in protein synthesis. $C_{42}H_{84}N_{14}O_{36}S_3$ MW 1457.4	5 g 25 g 50 g 100 g 1 kg	5.55 10.60 19.30 32.30 305.45
194541 **0-5°C**	**STREPTOMYCIN SULFATE** [3810-74-0] **Cell Culture Reagent** White powder Inhibits initiation and causes misreading of rRNA in protein synthesis. $C_{42}H_{84}N_{14}O_{36}S_3$ MW 1457.4	5 g 25 g 50 g 100 g	8.25 16.55 28.65 39.70
100557 **0-5°C**	**STREPTOZOTOCIN** [18883-66-4] (2-Deoxy-2[([methyl-nitrosoamino]-carbonyl)-amino]-D-glucopyranose) **Crystalline** **Mixed Anomers** Potent methylating agent for DNA. **Ref.:** Bennett, R.A., and Pegg, A.E., Cancer Res., **41**, 2786 (1981). $C_8H_{15}N_3O_7$ MW 265.2	50 mg 100 mg 500 mg 1 g 5 g	13.75 22.00 73.00 131.00 525.00
	STROPHANTHIN G *See*: Ouabain		
152077 **-20-0°C**	**SUBSTANCE P** [33507-63-0] (Arg-Pro-Lys-Pro-Gln-Gln-Phe-Phe-Gly-Leu-Met-NH_2) **Ref.:** 1. Chang, M., et al., Nature New Biol., **232**, 86 (1971). 2. Marx, J.L., et al., Science, **205**, 886 (1979). 3. Pernow, B., Pharmac. Rev., **35**, 85 (1983).	0.5 mg 1 mg 5 mg 10 mg	16.60 27.75 94.50 187.20
102975 **RT**	**SUCCINYLCHOLINE CHLORIDE** [71-27-2] **Dihydrate** **Crystalline** **Purity: 98-100%** $C_{14}H_{30}Cl_2N_2O_4 \bullet 2H_2O$ MW 397.3	25 g 100 g 250 g 500 g	26.25 81.40 194.05 369.40
153604 **RT**	**8-(p-SULFOPHENYL)THEOPHYLLINE** Adenosine antagonist $C_{13}H_{12}N_4SO$ MW 336.5	25 mg 50 mg 100 mg	25.35 43.35 79.55
195864 **RT**	**SULINDAC** [38194-50-2] (Z-5-Fluoro-2-methyl-1-[p-(methlsulfinyl)benzylidene]indene-3-acetic acid; MK-231; aflodac) **Purity: ≥99%** Non-steroidal anti-inflammatory which inhibits cyclooxygenase and prostaglandin synthesis. Causes adenoma regression by apoptotic mechanism and induces apoptosis in HT-29 cells at levels which affect cell proliferation, morphology and cell phase distribution. $C_{20}H_{17}FO_3S$ MW 356.4	1 g 5 g	10.50 22.00
196029 **RT**	**SULINDAC SULFIDE** [32004-67-4] **Purity: ≥99%** Cyclooxygenase inhibitor but not related to apoptosis induction. MW 340.4	1 mg 5 mg 25 mg	10.00 40.00 120.00

CATALOG NUMBER			U.S. $
	SULINDAC SULFONE	1 mg	10.00
196030	[59864-04-9]	5 mg	40.00
RT	**Purity: ≥99%**	25 mg	120.00
	Induces apoptosis but does not inhibit cyclooxygenase activity.		
	MW 372.4		
	(±)-SULPIRIDE	1 g	28.85
153569	[15676-16-1]	5 g	86.75
RT	(5-(Aminosulfonyl)-N-[(1-ethyl-2-pyrrolidinyl)methyl]-2-methoxy-benzamide)		
	D_2 Dopamine antagonist		
	$C_{15}H_{23}N_3O_4S$ MW 341.4		
	R(+)-SULPIRIDE	10 mg	45.55
153605	[23756-79-8]	15 mg	65.10
0-5°C	$C_{15}H_{23}N_3O_4S$ MW 341.4	25 mg	101.25
	S(-)-SULPIRIDE	10 mg	45.55
153606	[23672-07-3]	15 mg	65.10
RT	antidepressant.	25 mg	101.25
	(S(-)-5-(Aminosulfonyl)-N-[(1-ethyl-2-pyrrolodinyl)-methyl]-2-methoxybenzamide)		
	D_2 Dopamine antagonist		
	$C_{15}H_{23}N_3O_4S$ MW 341.4		
	SURAMIN	50 mg	30.35
159021	[129-46-4]	200 mg	66.00
RT	**Sodium Salt**	500 mg	153.00
	Purity: 98%		
	Various growth factor inhibitor. Protein G uncoupler from receptors through interaction with intracellular domains. A strong competitive reverse transcriptase inhibitor. Also demonstrates T-lymphocyte protection against HIV infection. Strongly inhibits melanoma heparanase and tumor cell metastasis.		
	Ref.: 1. Huang, R.-R.C., et al., Mol. Pharmacol., **37**, 304 (1990). 2. Hosang, M., J. Cell Biochem., **29**, 265 (1985). 3. Nakajima, M., et al., J. Biol. Chem., **266**, 9661 (1991). 4. Mitsuya, H., et al., Science, **226**, 172 (1984).		
	$C_{51}H_{34}N_6O_{23}S_6Na_6$ MW 1429.2		
	SWAINSONINE	0.5 mg	50.00
154250	[72741-87-8]	1 mg	96.00
0-5°C	**Purity: ≥98%**	5 mg	477.00
	α-Mannosidase inhibitor		
	$C_8H_{15}NO_3$ MW 173.1		
	SYNDYPHALIN-20	0.5 mg	39.00
152840	[82598-04-7]	1 mg	65.10
-20-0°C	(Syndyphalin SD-25; Tyr-D-Met(S=O)-Gly-Phe-ol)	5 mg	267.60
	A highly selective ligand for the μ-opiate receptor.		
	Ref: Kiso, Y., et al., Naturwissenschaften, **68**, 210 (1981).		
	SYNTHALIN	5 mg	51.60
158740	[111-23-9]	10 mg	82.60
RT	(N,N′-1,10-Decanediyl-*bis*(guanidine) sulfate)	25 mg	177.70
	Sulfate Salt		
	Purity: 99%		
	NMDA receptor polyamine site competitive antagonist.		
	Ref.: Reynolds, I.J., et al., *J. Pharmacol. Exp. Ther.*, **259**, 626 (1992).		
	MW 354.5		
	SYNTIDE 2	1 mg	128.40
159666	(Calmodulin-Dependent Protein Kinase Substrate)		
0°C	Pro-Leu-Ala-Arg-Thr-Leu-Ser-Val-Ala-Gly-Leu-Pro-Gly-Lys-Lys		
	A selective substrate for calmodulin-dependent protein kinase II.		
	MW 1507.8		

CATALOG NUMBER			U.S. $
	-T-		
	TAMOXIFEN	100 mg	14.00
156738	[10540-29-1]	250 mg	29.00
0-5°C	([Z]-1-[p-Dimethylaminoethoxyphenyl]-1,2-diphenyl-1-butene)	1 g	110.00
	Free Base		
	$C_{26}H_{29}NO$ MW 371.5		
	TAMOXIFEN	100 mg	19.00
156739	[54965-24-1]	250 mg	36.00
0-5°C	([Z]-1-[p-Dimethylaminoethoxyphenyl]-1,2-diphenyl-1-butene)	1 g	95.00
	Citrate Salt		
	Protein Kinase C inhibitor		
	$C_{26}H_{29}NO \bullet C_6H_8O_7$ MW 563.6		
	TAU	0.1 ml	225.00
638032	*MONOCLONAL ANTIBODY*		
-20°C	**Anti-Bovine**		
	Clone: TAU-2		
	Isotype: mouse IgG_1		
	Conc/Titer: 1:1,000		
	Applications: Immunoblotting		
	This product reacts exclusively with the chemically heterogenous Tau in both the phosphorylated and non-phosphorylated from. It does not react with MAP's or tubulin, and it localizes Tau along microtubules found in axons, somata, dendrites, astocytes, as well as, along ribosomes. It will stain Tau in the Alzheimer neurofibrillary tangles on formalin fixed paraffin embedded sections of human brain tissue. It demonstrates reactivity with human, bovine, monkey and chicken cells or tissues.		
	TAU	0.5 ml	330.00
657842	*POLYCLONAL ANTIBODY*		
-20°C	**Anti-Chicken**		
	Host: rabbit		
	Form: pooled delipidized antiserum		
	Conc/Titer: 1:100		
	Applications: Western blots; dot immunobinding		
	This antibody is produced by repeated injections of tau proteins from chick embryo brain. The antiserum is evaluated for specificity and potency by immunoenzymatic labeling procedures. It will not stain MAP1, MAP2, or tubulin.		
	TAXOL		
	A Registered Trademark for Paclitaxel		
	ψ-TECTORIGENIN	250 μg	137.60
159667	[13111-57-4]		
0-5°C	Inhibits EGF-receptor Tyrosine Kinase, which in turn blocks phosphatidylinositol turnover.		
	Ref.: Imoto, M., et al., J. Antibiotics, **44**, 915 (1991).		
	$C_{16}H_{12}O_6$ MW 300.3		
	R-(+)-TERGURIDE	5 mg	22.05
193719	[37686-84-3]	25 mg	88.20
RT	(*trans*-Dihydrolisuride)		
	The dehydrogenated analog of lisuride. A partial dopamine receptor agonist.		
	$C_{20}H_{28}N_4O$ MW 340.5		
	S-(-)-TERGURIDE	5 mg	22.05
193720	[37686-85-4]	25 mg	88.20
RT	**Maleate Salt**		
	Acts as both a dopamine receptor agonist and antagonist.		
	$C_{20}H_{28}N_4O \bullet C_4H_4O_4$ MW 456.5		

CATALOG NUMBER			U.S. $
193963 **-20°C**	**TETANUS TOXIN** From *Clostridium tetani* A potent inhibitor of neurotransmitter release with relative selectivity for GABA and Glycine. It also specifically cleaves synaptobrevin 2 which causes inhibition of neurotransmitter release. **Ref.:** Matsuda and Yoneda, Infection and Immunity, **12**, 1147 (1975). MW 150 kDa	10 µg	496.10
153542 **RT**	**TETRAETHYLAMMONIUM CHLORIDE** [56-34-8] A potassium channel blocker $C_8H_{20}ClN$ MW 165.7	25 g 100 g	14.75 40.00
158741 **RT**	**6,7,8,9-TETRAHYDRO-5[H]-BENZOCYCLOHEPTENE-5-OL-4-YLIDENE ACETIC ACID** [131733-92-1] (NCS 382) **Sodium Salt** **Purity: 98%** Antagonist for γ-hydroxybutyrate (GHB) which blocks sedative and catalytic effects. **Ref.:** 1. Hechler, V.D., et al., *J. Neurochem*., **49**, 1025 (1991). 2. Schmidt, C., et al., *Eur. J. Pharmacol*., **203**, 393 (1991).	5 mg 10 mg 50 mg	24.10 38.45 154.75
153622 **-20°C**	**(6R)-5,6,7,8-TETRAHYDRO-L-BIOPTERIN** [17528-72-2] **Dihydrochloride** A co-factor for nitric oxide synthase $C_9H_{15}N_5O_3$ • 2HCl MW 314.2	25 mg 50 mg 100 mg	101.25 187.95 361.50
159199 **0°C**	**TETRAHYDROCANNABINOL-7-OIC ACID** [39690-06-7] (11-nor-8-Tetrahydrocannabinol-9-carboxylic acid) **Purity: 98%** A tetrahydrocannabinol metabolite with bronchodilatory, anti-inflammatory and analgesic properties. Acts as a platelet activating factor antagonist and blocks leukocyte adhesion. **Ref.:** 1. Burstein, S., et al., FASEB J., **2**, 3024 (1988). 2. Burstein, S., et al., J. Pharmacol. Exp. Ther., **251**, 531 (1989). 3. Burstein, S., et al., Biochem. Pharmacol., **35**, 2553 (1986). MW 344.4	1 mg 5 mg	200.65 888.60
	9-(TETRAHYDRO-2-FURANYL)-9H-PURIN-6-AMINE *See*: SQ 22,536		
159668 **0°C**	**THAPSIGARGICIN** [67526-94-7] **Purity: 99%** Less potent analog of Thapsigargin. It has an n-hexanoate ester rather than n-octanoate on the 2-OH. $C_{32}H_{46}O_{12}$ MW 622.70	1 mg 5 mg	149.00 596.00
158999 **-20°C**	**THAPSIGARGIN** [67526-95-8] **Purity: 99%** Cell permeable sesquiterpene lactone tumor promoter. Inhibits endoplasmic reticulum Ca^{2+}-ATPase which induces the release of independent intracellular Ca^{2+}. **Ref.:** 1. Fujiki, H., et al., Carcinogenesis, **7**, 707 (1986). 2. Takemura, H., et al., J. Biol. Chem., **264**, 12266 (1989). 3. Thastrup, O., et al., Proc. Natl. Acad. Sci. USA, **87**, 2466 (1990). $C_{34}H_{50}O_{12}$ MW 650.8	1 mg 5 mg	69.50 236.50
103024 **RT**	**THEOPHYLLINE** [58-55-9] (1,3-Dimethylxanthine) **Crystalline** **Anhydrous** $C_7H_8N_4O_2$ MW 180.2	100 g 250 g 500 g 1 kg	15.50 34.00 61.70 92.45

CATALOG NUMBER			U.S. $
16026 **0-5°C**	**THEOPHYLLINE, [8-^{14}C]** Sp. Act. 40-60 mCi/mmol 1.48-2.22 GBq/mmol Ethanol solution. *Please call for delivery information.* MW 180.17	250 µCi 1 mCi	969.00 1937.00
26051 **0-5°C**	**THEOPHYLLINE, [8-^{3}H]** Sp. Act. 10-20 Ci/mmol 370-740 GBq/mmol Ethanol solution. *Please call for delivery information.* MW 180.17	1 mCi	1068.20
159669 **0°C**	**2-(1-THIENYL)ETHYL-3,4-DIHYDROXYBENZYLIDENE-CYANOACETATE** [132465-10-2] **Purity: 99%** Inhibits 12-lipoxygenase. $C_{16}H_{13}NO_4S$ MW 315.3	1 mg 5 mg 25 mg	13.75 41.25 188.00
195065 **-20°C**	**L-THIOCITRULLINE** [156719-37-8] **Purity: ≥97%** Potent and stereo-specific heme-binding inhibitor of brain, endothelial, and inducible smooth muscle isoforms of nitric oxide synthase. **Ref.:** Narayanan, K. and Griffith, O.W., J. Med. Chem., **37**, 855 (1994). $C_6H_{13}N_3O_2S$ MW 191.3	1 mg 5 mg 25 mg	12.10 38.60 148.85
152129 **0-5°C**	**THIOMUSCIMOL** **Free base** **Crystalline** $GABA_A$ receptor agonist **Ref.:** Krogsgarrd-Larsen, et al., J. Neurochem., **32**, 1717 (1978)	10 mg 25 mg	306.35 425.45
158754 **RT**	**THIOPERAMIDE** [106243-16-7] (N-Cyclohexyl-4-(imidazol-4-yl)-1-piperidinecarbothioamide) **Maleate Salt** **Purity: ≥98%** Selective and potent antagonist of histamine H_3. **Ref.:** 1. Arrang, J.M., et al., *Nature*, **327**, 117 (1987). 2. LaBelle, F.S., et al., *Brit. J. Pharmacol*., **107**, 161 (1992). $C_{15}H_{24}N_4SC_4H_4O_4$ MW 408.5	5 mg 10 mg 25 mg	53.90 89.40 195.50
156891 **RT**	**THIORIDAZINE** [130-61-0] (10-[2-(1-Methyl-2-piperidyl)-ethyl]-2-[methylthiol]-phenothiazine) **Hydrochloride** **Purity: 98%** Calcium channel antagonist. Also a dopamine antagonist. $C_{21}H_{26}N_2S_2$ • HCl MW 407	1 g 5 g 25 g	18.35 40.00 170.00
152841 **-20-0°C**	**DL-THIORPHAN** [76721-89-6] ([DL-3-Mercapto-2-benzyl-propanoyl]-glycine) A potent and specific enkephalinase inhibitor with antinociceptive activity. **Ref:** 1. Roques, B.P., et al., Nature, **288**, 286 (1980). 2. Roques, B.P., et al Life Sci., **31**, 1749 (1982). 3. Evans, D.A., et al., J. Org. Chem., **50**, 1830 (1985). $C_{12}H_{15}NO_3S$ MW 253.3	1 mg 5 mg 25 mg	21.00 72.10 337.50
153603 **RT**	**THIOTHIXENE** [5591-45-7] (N,N-Dimethyl-9-[3-(4-methyl-1-piper-azinyl) propylidene]thio-xanthene-2-sulfonamide) **Hydrochloride** D_1/D_2 Dopamine antagonist. $C_{23}H_{29}N_3O_2S_2$ • HCl MW 480.1	25 mg 50 mg 100 mg	18.05 28.85 52.00

CATALOG NUMBER			U.S. $
153602 **0-5°C**	**THIP** [64603-91-4] (Gaboxadol; 4,5,6,7-Tetra-hydroisoxazolo[5,4-c]pyridin-3-ol) **Hydrochloride** Post synaptic GABA receptor agonist $C_6H_8N_2O_2$ • HCl MW 176.5	10 mg 15 mg 25 mg	31.80 45.55 72.25
159000 **-20°C**	**THYMELEATOXIN** [94402-56-1] **Purity: 99%** Diterpene isolated from *Thymelea hirsuta L.* which specifically activates α, β, γ-PKC isozymes over δ and ε isozymes. $C_{36}H_{36}O_{10}$ MW 628.7	1 mg	310.00
156923 **RT**	**TIMOLOL** [26921-17-5] (S[-]-1-[t-Butylamino]-3-(4-morpholino-1,2,5-thiadiazol-3-yl)oxy]-2-propanol) **Maleate Salt** A β-adrenergic antagonist. $C_{13}H_{24}N_4O_3S$ • $C_4H_4O_4$ MW 432.5	100 mg 250 mg 1 g	35.00 77.00 300.00
159670 **0°C**	**TINYATOXIN** [58821-95-7] **Purity: 99%** Analog of resiniferatoxin $C_{36}H_{38}O_8$ MW 598.7	500 µg	73.00
	TMB-8 *See*: 3,4,5-Trimethoxybenzoic acid 8-(diethylamino)-octylester		
159001 **RT**	**TOLAZAMIDE** [1156-19-0] (U 17835; 1-[Hexahydro-1H-azepin-1-yl]-3-[p-toluenesulfonyl]urea) **Purity: 98%** Antidiabetic sulfonylurea that blocks ATP-sensitive potassium ion channels. **Ref.:** Schmid-Adomarch, H., et.al., J. Biol. Chem., **262**, 15840 (1987). $C_{14}H_{21}N_3O_3S$ MW 311.4	1 g 5 g 25 g	7.45 35.55 125.00
190274 **RT**	**TOLBUTAMIDE** [64-77-7] (3-[p-Tolyl-4-sulfonyl]-1-butylurea) **Crystalline** $C_{12}H_{18}N_2O_3S$ MW 270.3	25 g 100 g 500 g	12.50 34.00 112.00
16027 **0-5°C**	**TOLBUTAMIDE, [Carbonyl-^{14}C]** Sp. Act. 50-60 mCi/mmol 1.85-2.22 GBq/mmol Ethanol solution. *Please call for delivery information.* $CH_3C_6H_4SO_2NH\mathbf{C}ONH(CH_2)_3CH_3$ MW 270.3	10 µCi 50 µCi	192.85 459.65
153594 **RT**	**TRACAZOLATE** [41094-88-6] (4-(Butylamino)-1-ethyl-6-methyl-1H-pyrazolo [3,4-b] pyridine-5-carboxylic acid ethyl ester) $C_{16}H_{24}N_4O_2$ MW 304.4	2 mg 5 mg 10 mg	21.75 43.35 79.55
	TRANYLCYPROMINE *See*: *trans*-2-Phenylcyclopropylamine		
191518 **RT**	**TRAZODONE** [25332-39-2] **Hydrochloride** A serotonin uptake inhibitor. $C_{19}H_{22}ClN_5O$ • HCl MW 408.3	1 g 5 g	13.00 42.65
159002 **RT**	**TREQUINSIN** [78416-81-6] (HL 725) **Purity: 98%** Specific and extremely potent cGMP-inhibited phosphodiesterase inhibitor. **Ref.:** Rupert, D. and Weithmann, K.U., Life Sci., **31**, 2037 (1982). MW 442	5 mg 10 mg	84.85 146.70
195851 **-20°C**	**TRIACSIN C** [76896-80-5] **Purity: ~90%** Selectively inhibits arachidonoyl-CoA synthetase in intact cells and the non-specific acyl-CoA synthetase in cell sonicates. MW 207.3	100 µg 1 mg	262.50 1044.75
156960 **RT**	**TRIAMTERENE** [396-01-0] **Purity: 98%** Sodium channel blocker $C_{12}H_{11}N_7$ MW 253.3	10 g 25 g	24.00 48.00
195683 **-20°C**	**TRICYCLODECAN-9-YL XANTHOGENATE** [83373-60-8] (D609) **Purity: 98%** **Potassium Salt** A selective inhibitor of phosphatidylcholine-specific PLC. Possesses antitumor and antiviral activity. MW 266.5	1 mg 5 mg	22.00 104.00
190089	**TRIFLUOPERAZINE** [440-17-5] (10-[3-(4-Methyl-1-piperazinyl)propyl]-2-trifluoromethylphenothiazine) **Dihydrochloride** Calmodulin antagonist **Ref.:** R.M. Levin, B. Weiss, J. P. Pharmacol. Exp. Ther., **208**, 454 (1978). $C_{21}H_{24}F_3N_3S$ • 2HCl MW 480.4	5 g 10 g 25 g	23.95 43.70 78.65
193722 **RT**	**1-(2-TRIFLUOROMETHYL-PHENYL)IMIDAZOLE** (TRIM) A potent inhibitor of neuronal and inducible nitric oxide synthase. **Ref.:** Handy, et al., Br. J. Pharmacol., **116**, 2349 (1995). $C_{10}H_7N_2F_3$ MW 212.2	10 mg 50 mg	13.65 52.50
193723 **RT**	**N-(3-TRIFLUOROMETHYL-PHENYL)PIPERAZINE** [16015-69-3] (TFMPP) **Hydrochloride** A serotonin receptor agonist. $C_{11}H_{13}N_2F_3$ • HCl MW 266.7	1 g 5 g	17.65 52.90
153595 **0-5°C**	**TRIFLUPERIDOL** [2062-77-3] (R 2498) 4′-Fluoro-4-[4-hydroxy-4(α,α,α-trifluoro-m-tolyl)piperidino]butyrophenone) **Hydrochloride** Neuroleptic dopamine antagonist $C_{22}H_{23}F_4NO_2$ • HCl MW 445.9	25 mg 50 mg 100 mg	36.15 69.40 130.15
157047 **RT**	**DL-TRIHEXYPHENIDYL** [58947-95-8] **Hydrochloride** Muscarinic receptor antagonist $C_{20}H_{31}NO$ • HCl MW 337.9	5 g 10 g	46.10 87.20
153596 **-20-0°C**	**R(-)-2,10,11-TRIHYDROXYAPORPHINE** [77630-01-4] (R(-)-2-Hydroxyapomorphine) **Hydrobromide** Dopamine agonist $C_{17}H_{17}NO_3$ • HBr MW 364.2	15 mg 25 mg 50 mg	57.80 94.00 173.50
	4′,5,7-TRIHYDROXYISOFLAVONE *See*: Genistein		
153597 **0-5°C**	**R(-)-2,10,11-TRIHYDROXY-N-PROPYLNORAPORPHINE** [77630-02-5] (TPNA) **Hydrobromide** 2-OH-NPA D_2 Dopamine agonist $C_{19}H_{21}NO_3$ • HBr MW 392.3	2 mg 5 mg 10 mg	25.35 50.60 94.00

CATALOG NUMBER			U.S. $
	TRIM *See*: 1-(2-Trifluoromethylphenyl)imidazole		
157064 RT	**3,4,5-TRIMETHOXYBENZOIC ACID 8-(DIETHYLAMINO) OCTYL ESTER** [53464-72-5] (TMB-8; 8-(Diethylamino)octyl-3,4,5-trimethoxybenzoate) **Hydrochloride** **Purity: 98%** Inhibits intracellular calcium mobilization **Ref.:** 1. Chiou, C.Y., et al., Br. J. Pharmacol., **553**, 279 (1985). 2. Donowitz, M., et al., Am. J. Physiol., **250**, G691 (1986). $C_{22}H_{37}NO_5$ • HCl MW 432	10 mg 50 mg	20.00 86.30
193724 0-5°C	**TRIMETHYLSEROTONIN IODIDE** (5-HTQ) A quaternary analog of serotonin, which acts as a 5-HT_3 serotonin receptor agonist. $C_{13}H_{19}N_2OI$ MW 346.2	1 mg 5 mg 10 mg	16.55 43.00 77.15
157097 0-5°C	**3-(TRIMETHYLSILYL)-1-PROPANESULFONIC ACID** [2039-96-5] (DSS; 2,2-Dimethyl-2-silapentane-5-sulfonate) **Sodium Salt** **Purity: 99%** **Crystalline** $C_8H_{15}O_3SSiNa$ MW 218.3	500 mg 1 g 5 g	15.85 25.40 117.40
153591 RT	**1,3,9-TRIMETHYLXANTHINE** [519-32-4] (Isocaffeine; 2,6-Dihydroxy-1,3,9-trimethylpurine) $C_8H_{10}N_4O_2$ MW 194.2	25 mg 50 mg 100 mg	17.35 28.85 50.60
157112 RT	**TRIPELENNAMINE** [154-69-8] (2-[Benzyl(2-dimethylamino-ethyl)amino]pyridine) **Hydrochloride** **Crystalline** An H_1 histamine receptor antagonist. $C_{16}H_{21}N_3$ • HCl MW 291.8	25 g 100 g	36.00 126.00
157116 0-5°C	**TRIPROLIDINE** [6138-79-0] (trans-2-[3-(1-Pyrrolidinyl)-1-p-tolylpropenyl]pyridine) **Hydrochloride** H_1 Histamine antagonist $C_{19}H_{22}N_2$ • HCl MW 314.9	5 g 25 g	33.45 137.20
157143 RT	**TROLEANDOMYCIN** [2751-09-9] (Oleandomycin triacetate) **Purity: 98%** Inhibits cytochrome P-450 mediated nitric oxide release from N^G-hydroxy-L-arginine. $C_{41}H_{67}NO_{15}$ MW 814	1 g 5 g 25 g	18.20 77.00 380.00
153592 0-5°C	**3-TROPANYL-3,5-DICHLOROBENZOATE** [40796-97-2] (MDL 72222) 5-HT_3 serotonin antagonist $C_{15}H_{17}Cl_2NO_2$ MW 314.2	25 mg 50 mg 100 mg	17.35 28.85 50.60
193725 0-5°C	**3-TROPANYL INDOLE-3-CARBOXYLATE** [89565-68-4] **Hydrochloride** A selctive 5-HT_3 serotonin receptor anyagonist. $C_{17}H_{20}N_2O_2$ • HCl MW 320.8	10 mg 50 mg	27.55 110.25
153185 -20-0°C	**TRP-NLE-ARG-PHE AMIDE** [83903-33-7] A molluscan cardioexcitatory neuropeptide analog.	1 mg 5 mg 10 mg	30.80 135.00 260.00
100612 0-5°C	**TRYPSIN INHIBITOR** [9035-81-8] **From Chicken Eggwhites** Essentially Salt-free Lyophilized 1 mg inhibits 1.0-3.0 mg of trypsin.	250 mg 500 mg 1 g 5 g	16.70 27.85 46.50 220.00
100798 0-5°C	**TRYPSIN INHIBITOR** [9035-81-8] **From Lima Beans** Salt-free Lyophilized 1 mg inhibits 2.3-3.0 mg. of trypsin. Stable: 1-2 years **Ref.:** Fraction III: Arch. Biochem. Biophys. *37;* 393 (1952).	25 mg 100 mg 500 mg 1 g	19.80 60.50 180.00 350.00
101113 0°C	**TRYPSIN INHIBITOR** [9035-81-8] **From Soybean** Chromatographically prepared, lyophilized, salt free **Activity:** >10.000 BAEE units of inhibition/mg material **Unit Definition:** One unit will inhibit one unit of Trypsin activity (BAEE).	25 mg 100 mg 250 mg 500 mg 1 g 5 g	18.00 45.00 85.00 135.00 240.00 950.00
159003 RT	**TUBULOZOLE C** [84697-22-3] (R 46846) **Hydrochloride** **Purity: 99%** Blocks tubulin polymerization. **Ref.:** 1.Van Ginckel, R., et al., Eur. J. Cancer Clin. Oncol., **20**, 99 (1984). 2. Geuens, G.M.A., et,al., Cancer Res., **45**, 733 (1985). $C_{23}H_{23}N_3O_4SCl_2$ • HCl MW 544.9	5 mg 25 mg	37.00 130.00
159004 RT	**TUBULOZOLE T** (R 64181) **Purity: 99%** An inactive trans-isomer of Tubulozole C. $C_{23}H_{23}N_3O_4SCl_2$ • HCl MW 544.9	5 mg 25 mg	35.00 118.00
150028 0-5°C	**TUNICAMYCIN** [11089-65-9] From *Streptomyces* sp. **Antibiotic** Inhibits many biochemical functions such as synthesis of glycoproteins, procollagen and peptidoglycans; and IgA and IgE secretion by plasma cells. Also affects the fibroblast interferon-cell system. MW 840.0	1 mg 5 mg 10 mg	17.10 56.90 95.15
193727 0-5°C	**TYROSINE PHOSPHORYLATION SITE INHIBITOR PEPTIDE** Gly-Ser-Phe-Leu-Val-Arg-Glu-Ser Blocks binding at phosphorylated tyrosine sites. MW 894.0	1 mg 5 mg	82.70 330.75
159556 0-5°C	***bis*-TYRPHOSTIN** **Purity: 99%** Inhibitor of protein tyrosine kinases. $C_{23}H_{20}N_4O_6$ MW 448.4	1 mg 5 mg 25 mg	13.75 41.25 151.35
158818 RT	**TYRPHOSTIN A1** [2826-26-8] **Purity: >99%** An inactive tyrphostin which may be used as a negative control in tyrosine kinase inhibition assays[1]. **Ref:** 1. Gazit, A., et al., (1989), *J. Med. Chem.*, **32**, 2344. $C_{11}H_8N_2O$ MW 184.2	20 mg 100 mg	62.65 250.40

Neuroscience

CATALOG NUMBER			U.S. $
158819 **RT**	**TYRPHOSTIN A9** [10537-47-0] (RG-50872) **Purity: >99%** Tyrphostin 9 is a selective inhibitor of the PDGF receptor tyrosine kinase (IC_{50}=1.2 μM)[1,2]. It is also a potent (10 nM) uncoupler of oxidative phosphorylation[3]. **Ref:** 1. Levitzki, A. and Gilon, (1991), *Trends Pharmacol. Sci.*, **12**, 171. 2. Bilder, G.E., et al., (1991), *Am. J. Physiol.*, **260**, C721. 3. Terada, H., (1981), *Biochem. Biophys. Acta*, **639**, 225. $C_{18}H_{22}N_2O$ MW 282.4	50 mg 250 mg	71.40 284.25
193728 **RT**	**TYRPHOSTIN A10** (AG-126) **Purity: >99%** Inhibits tyrosine kinase-dependent B-cell receptor signalling. Also reported to prevent septic shock in mice. **Ref.:** 1. Sarmay, G., et al., Proc. Natl. Acad. Sci. USA, **91**, 4140 (1994). 2. Roifman, C.M. and Wong, G., J. Immunol., **149**, 1179 (1992). $C_{10}H_5N_3O_3$ MW 215.3	5 mg 25 mg	86.00 328.55
158820 **RT**	**TYRPHOSTIN A23** [118409-57-7] (RG-50810) **Purity: >99%** A potent inhibitor of EGF receptor kinase activity[1,2,3]. **Ref:** 1. Gazit, A., et al., (1989), *J. Med. Chem.*, **32**, 2344. 2. Lyall, R.M., et al., (1989), *J. Biol. Chem.*, **264**, 14503. 3. Yaish, P., et al., (1988), *Science*, **242**, 933. $C_{10}H_6N_2O_2$ MW 186.1	10 mg 50 mg	73.80 300.55
158821 **RT**	**TYRPHOSTIN A25** [118409-58-8] (RG-50875) **Purity: >99%** A potent inhibitor of EGF receptor kinase activity[1,2,3]. **Ref:** 1. Gazit, A., et al., (1989), *J. Med. Chem.*, **32**, 2344. 2. Bilder, G.E., et al., (1991), *Am J. Physiol.*, **260**, C721. 3. Yaish, P., et al., (1988), *Science*, **242**, 933. $C_{10}H_8N_2O_3$ MW 202.1	5 mg 25 mg	75.05 300.55
159678 **0-5°C**	**TYRPHOSTIN A46** [122520-85-8] (3,4-Dihydroxy-α-cyanocinnamide) **Purity: 99%** Inhibitor of EGF receptor tyrosine kinase activity. $C_{10}H_8N_2O_3$ MW 204.2	5 mg 25 mg 100 mg	17.20 57.35 194.95
158822 **RT**	**TYRPHOSTIN A47** [122520-86-9] (RG-50864) **Purity: >99%** A potent inhibitor of EGF receptor kinase activity[1,2,3]. **Ref:** 1. Gazit, A., et al., (1989), *J. Med. Chem.*, **32**, 2344. 2. Lyall, R.M., et al., (1989), *J. Biol. Chem.*, **264**, 14503. 3. Yaish, P., et al., (1988), *Science*, **242**, 933. $C_{10}H_8N_2O_2S$ MW 220.2	5 mg 25 mg	86.35 340.60
159679 **0-5°C**	**TYRPHOSTIN A48** (3-Amino-2,4-dicyano-5-[4′-hydroxyphenyl]penta-2,4-dienonitrile) **Purity: 99%** $C_{13}H_8N_4O$ MW 236.2	5 mg 25 mg 100 mg	13.75 51.60 183.45
158823 **RT**	**TYRPHOSTIN A51** [122520-90-5] **Purity: >99%** A potent inhibitor of EGF receptor kinase activity. Inhibition is mixed competitive with ATP and substrate[1,2,3]. **Ref:** 1. Gazit, A., et al., (1989), *J. Med. Chem.*, **32**, 2344. 2. Yaish, P., et al., (1988), *Science*, **242**, 933. 3. Lyall. R.M., et al., (1989), *J. Biol. Chem.*, **242**, 933. $C_{13}H_8N_4O_3$ MW 268.2	5 mg 25 mg	86.35 340.60
159680 **0-5°C**	**TYRPHOSTIN A63** [5553-97-9] ([4-Hydroxybenzyl]malononitrile) **Purity: 99%** Useful as a negative control. $C_{10}H_8N_2O$ MW 172.2	1 mg 5 mg 25 mg	13.75 42.40 169.70
158816 **0°C**	**TYRPHOSTIN B7** (AG-370) AG-370 is a member of the tyrphostin family of tyrosine kinase inhibitors and is a selective inhibitor of the PDGF receptor kinase (IC_{50}=20 μM) versus the EGF receptor kinase[1]. **Ref:** 1. Levitzki, A. and Gilon C. (1991) *Trends Pharmacol. Sci.*, **12:** 171. 2. Levitzki, A. et al. (1991) *Methods Enzymol.*, **201:** 370.	2 mg	106.70
193729 **0-5°C**	**TYRPHOSTIN B42** (AG-490; N-Benzyl-3,4-dihydroxy-α-cyanocinnamide) **Purity: >99%** A protein tyrosine kinase inhibitor. $C_{17}H_{14}N_2O_3$ MW 294.3	5 mg 10 mg 25 mg	44.10 82.70 165.35
193731 **0-5°C**	**TYRPHOSTIN B46** (AG-555; N-(3-Phenylpropyl)-3,4-dihydroxy-αyanocinnamide) **Purity: >99%** A protein tyrosine kinase inhibitor. $C_{19}H_{18}N_2O_3$ MW 322.4	5 mg 10 mg 25 mg	44.10 82.70 165.35
158817 **RT**	**TYRPHOSTIN B48** (AG-494) **Purity >99%** AG-494 is a member of the tyrphostin family of tyrosine kinase inhibitors and is a potent inhibitor of EGF receptor auto-phosphorylation (IC_{50}=1.2 μM) and EGF-dependent cell growth (IC_{50}=6μM)[1]. MW 280.3 **Ref:** 1. Levitzki, A. et al. (1991) *Methods Enzymol.*, **201:** 370.	10 mg 50 mg	62.65 250.40
152960 **-20-0°C**	**TYR-PRO-LEU-GLY AMIDE** ([Tyr^6]-Oxytocin, Fragment 6-9; Tyr-MIF-1; Tyr-Melanocyte-stimulating Hormone-Release Inhibiting Factor) This C-terminal tripeptide of oxytocin, has activity in numerous behavioral tests and clinical situations. This compound has antiopiate activity. **Ref:** 1. Zadina, J.E., et al, Pharmacol. Biochem. Behav., **17**, 1193 (1982). 2. Kasin, A.J., et al., Pharmacol. Biochem. Behav., **23**, 1045 (1985).	5 mg 25 mg	10.30 46.00

CATALOG NUMBER | U.S. $

-U-

158833 RT — **U-0521** [5466-89-7] (3′,4′-Dihydroxy-2-methylpropiophenone) **Purity: > 98%** Catechol-O-methyltransferase (COMT) inhibitor. **Ref:** 1. Bryan, L.J., et al., (1983), *Naunyn Schmiedeberg's Arch. Pharmacol.*, **322**, 6. 2. Reches, A. & Fahn, S., (1984), *Adv. Neurol.*, **40**, 1716. 3. Duncan, P.G., et al., (1985), *Eur. J. Pharmacol.*, **108**, 39. MW 180.2
20 mg 57.60
100 mg 227.90

U-10858

See: Minoxidil

U-17835

See: Tolazamide

159005 RT — **U-73122** [112648-68-7] (1-(6-[(17β-3-Methoxyestra-1,3,5-(10)-trien-17-yl)amino]hexyl)-1H-pyrrole-2,5-dione) **Purity: 98%** Inhibitor of phospholipase C activation in human platelets and neutrophils. Inhibits down regulation of muscarinic receptors. **Ref.:** 1. Smith, R.J., et al., J. Pharmacol. Exp. Ther., **253**, 688 (1990). 2. Bleasdale, J.E., et al., ibid., **255**, 756 (1990). 3. Thompson, A.K., et al., J. Biol. Chem., **266**, 23856 (1991). $C_{29}H_{40}N_2O_3$ MW 464.7
5 mg 65.00
10 mg 125.00

159006 RT — **U-73343** [142878-12-4] (1-[6-([17β-3-Methoxyestra-1,3,5 (10)-trien-17-yl]amino)hexyl]-2,5-pyrrolidine-dione) Inactive analog of U73122 which is used as a negative control. **Ref.:** 1. Smith, R.J., et al., J. Pharmacol. Exp. Ther., **253**, 688 (1990). 2. Bleasdale, J.E., et al., ibid., **255**, 756 (1990). $C_{29}H_{42}N_2O_3$ MW 466.7
1 mg 58.00
5 mg 190.00

U-7984

See: Decoyinine

193736 RT — **URAPIDIL** [64887-14-5] **Hydrochloride** An α_1-adrenoceptor antagonist and partial 5-HT_{1A} serotonin receptor agonist. $C_{20}H_{29}N_5O_3 \bullet HCl$ MW 423.9
25 mg 18.00
100 mg 70.00
250 mg 150.00

-V-

105010 0-5°C — **VALINOMYCIN** [2001-95-8] **Purity: ≥93% Crystalline** A metabolite with a broad antibiotic spectrum. Inhibitor of mitochondrial action. $C_{54}H_{90}N_6O_{18}$ MW 1111.4
5 mg 17.80
10 mg 29.70
25 mg 52.40
100 mg 177.85

195540 0-5°C — **VANCOMYCIN** [123409-00-7] **Hydrochloride** Potency approx. 1000 µg/mg Inhibits bacterial mucopeptide biosynthesis.
100 mg 16.35
250 mg 30.65
1 g 97.85
5 g 384.35

152962 -20-0°C — **[Arg^8]-VASOPRESSIN** [113-79-1] (AVP; Arginine Vasopressin; Antidiuretic Hormone; β-Hypophamine; Cys-Tyr-Phe-Gln-Asn-Cys-Pro-Arg-Gly-NH_2) Contains disulfide bond between Cys^1 and Cys^6.
0.5 mg 15.20
1 mg 25.20
5 mg 80.70

152964 -20-0°C — **[$Asu^{1,6}$,Arg^8]-VASOPRESSIN** [40944-53-4] (Tyr-Phe-Gln-Asn-Asu-Pro-Arg-Gly-NH_2) Contains bond between Tyr and Asu. An analog of arginine vasopressin. **Ref:** Hase, S., et al., J. Am. Chem. Soc., **94**, 3590 (1972).
0.5 mg 41.45
1 mg 80.00

152967 -20-0°C — **[Deamino-Pen^1,O-Me-Tyr^2,Arg^8]-VASOPRESSIN** [67269-08-3] (3-Mercapto-3-methylbutyryl-Tyr[O-Methyl]-Phe-Gln-Asn-Cys-Pro-Arg-Gly-NH_2) Contains disulfide bond between 3-mercapto group and Cys.
0.5 mg 39.85
1 mg 54.55

152969 -20-0°C — **[β-Mercapto-β,β-cyclopentamethylenepropionyl^1, O-Me-Tyr^2,Arg^8]-VASOPRESSIN** [73168-24-8] (Manning Compound; [1-Mercaptocyclohexyl]acetyl-Tyr[O-Methyl]-Phe-Gln-Asn-Cys-Pro-Arg-Gly-NH_2) Contains disulfide bond between mercaptocyclohexyl group and Cys. An antagonist of arginine vasopressin. **Ref:** Kruszyn i, M., et al., J. Med. Chem., **23**, 364 (1980).
0.5 mg 45.00
1 mg 74.80

153587 RT — **S(-)-VERAPAMIL** [36622-28-3] $C_{27}H_{38}N_2O_4 \bullet HCl$ MW 491.0
2 mg 144.60
5 mg 216.95
10 mg 426.65

195545 RT — **(±)-VERAPAMIL** [52-53-9] **Hydrochloride** α_1-Antagonist and calcium channel modulator **Ref.:** Atlas, D. and Adler, M., Proc. Nat. Acad. Sci. U.S.A., **78**, 1237 (1981). $C_{27}H_{38}N_2O_4 \bullet HCl$ MW 491.1
1 g 29.95
5 g 94.85
10 g 170.95

153586 RT — **R(+)-VERAPAMIL** [38176-10-2] **Hydrochloride** $C_{27}H_{38}N_2O_4 \bullet HCl$ MW 491.0
2 mg 72.25
5 mg 144.60
10 mg 282.05

159007 -20°C — **VERATRIDINE** [71-62-5] **Free Base** **Purity: 98%** Activates sodium ion channels. It also prevents inactivation of sodium channels. Results in larger negative activation potentials. **Ref.:** 1. leibowitz, M.D., et.al., J. Gen. Physiol., **87**, 25 (1986). 2. Sutro, J. B., ibid., **87**, 1 (1986). 3. Rando, T.A., et.al., J. Pharmacol. Exp. Ther., **29**, 467 (1986). 4. Rando, T.A., J. Gen. Physiol., **93**, 43 (1989). $C_{36}H_{51}NO_{11}$ MW 673.8
10 mg 76.95
5x10 mg 380.00

153588 0-5°C — **(±)-VESAMICOL** [120447-62-3] (AH-5183) (±)-2-(4-Phenylpiperidino) cyclohexanol) **Hydrochloride** $C_{17}H_{25}NO \bullet HCl$ MW 295.5
100 mg 30.30
150 mg 43.40
250 mg 68.80

153589 0-5°C — **D-(+)-VESAMICOL** [112709-60-1] **Hydrochloride** $C_{17}H_{25}NO \bullet HCl$ MW 295.5
15 mg 68.80
25 mg 110.20
50 mg 206.60

153590 0-5°C — **L-(-)-VESAMICOL** [112709-59-8] **Hydrochloride** $C_{17}H_{25}NO \bullet HCl$ MW 295.5
10 mg 62.00
15 mg 89.55
25 mg 137.70

190687 0-5°C — **VINCRISTINE SULFATE** [2068-78-2] **Purity: ~99%** An anti-tumor alkaloid used in cancer research. **Ref.:** Cancer Res., **38**, 4722 (1978). $C_{46}H_{58}N_4O_{14}S$ MW 923
1 mg 34.10
5 mg 111.05
25 mg 496.80

Neuroscience

CATALOG NUMBER			U.S. $
	VINPOCETINE	20 mg	64.20
159008	[42971-09-5]	50 mg	153.10
RT	**Purity: 98%**	100 mg	292.35
	Specific Ca^{2+}-calmodulin-dependent phosphodiesterase inhibitor. **Ref.:** 1. Ahn, H.S., et al., Biochem. Pharmacol., **38**, 33331 (1989). 2. Hagiwara, M., et al., Biochem. Pharmacol., **33**, 453 (1984). $C_{22}H_{26}N_2O_2$ MW 350.5		

-W-

W-5

See: N-(6-Aminohexyl)-1-naphthalenesulfonamide

W-7

See: N-(6-Aminohexyl)-5-chloro-1-naphthalenesulfonamide

W-12

See: N-(4-Aminobutyl)-2-naphthalenesulfonamide

W-13

See: N-(4-Aminobutyl)-5-chloro-2-naphthalenesulfonamide

	WATER, For PCR Applications	1 vial	11.50
195720	[7732-18-5]	5 vials	42.50
RT	18 Megohm, Sterile Filtered DNase, RNase - None detected Ideal for use in polymerase chain reactions (PCR). Each vial = 1.5 ml water. H_2O MW 18.02		

WB-4101

See: 2-(2,6-Dimethoxyphenoxyethyl)aminomethyl-1,4-benzodioxane

	WORTMANNIN	1 mg	30.50
195690	[19545-26-7]	5 mg	120.65
0°C	A fungal metabolite which potently and selectively inhibits phosphatidylinositol 3-kinase. It also inhibits fMLP induced PIP_3 and superoxide anion production in guinea pig neutrophils. It blocks insulin metabolic effects in rat adipocytes without affecting the insulin receptor tyrosine kinase activity. $C_{23}H_{24}O_8$ MW 428.4		

-X-

	XANTHINE AMINE CONGENER	2 mg	25.35
153585	[96865-92-8]	5 mg	50.60
RT	(XAC) (8-[4-[[[(2-Aminoethyl)amino] carbonyl]methyl]oxy]phenyl]-1,3-dipropylxanthine) A_1 Adenosine receptor antagonist $C_{21}H_{28}N_6O_4$ MW 428.5	10 mg	94.00
	XYLAMINE	10 mg	39.00
153581	[57913-68-5]	15 mg	54.70
RT	(N-(2-Chloroethyl)-N-ethyl-2-methylbenzylamine) Xylamine is a selectively irreversible inhibitor of norepinephrine uptake into central and peripheral noradrenergic neurons. **Hydrochloride** $C_{12}H_{18}ClN \bullet HCl$ MW 248.2	25 mg	86.75

-Y-

	YOHIMBINE	1 g	12.30
195546	[65-19-0]	5 g	35.85
RT	**Hydrochloride**	10 g	64.60
	Crystalline	25 g	128.65
	α_2-Adrenergic antagonist $C_{21}H_{26}N_2O_3 \bullet HCl$ MW 390.9	100 g	355.80

YS-035

See: N,N-*bis*(3,4-Dimethoxyphenylethyl)-N-methylamine

-Z-

	ZAPA	10 mg	119.05
158829	[92138-10-8]	25 mg	261.95
RT	(Z-3-(Amidinothio)propenoic acid) **Purity: >98%** More potent than either GABA or muscimol as an agonist at low affinity $GABA_A$ receptors. MW 146.2 **Ref:** 1. ALlan, R.D. et al. (1986) *Br. J. Pharmacol.* **88:** 379.		
	ZAPRINAST	20 mg	49.90
156931	[37762-06-4]	50 mg	123.00
RT	(1,4-Dihydro-5-[2-propoxyphenyl]-7H-1,2,3-triazolo[4,5d]pyrimidine-7-one; M & B 22948) **Purity: 98%** Selective cGMP specific phosphodiesterase inhibitor. **Ref.:** 1. Gillespie, P.G., et al., *Mol. Pharmacol.*, **36**, 773 (1989). 2. Burns, F., et al., *Biochem. J.*, **238**, 487 (1992). $C_{13}H_{13}N_5O_2$ MW 271.3	100 mg	244.00
	ZIMELIDINE	10 mg	39.00
153582	**Dihydrochloride**	15 mg	54.70
RT	**Monohydrate**	25 mg	86.75
	Serotonin uptake inhibitor $C_{16}H_{17}N_2Br \bullet 2HCl \bullet H_2O$ MW 408.2		