

Neurochemicals

Newsletter 01/2011 - New Products for Neuroscience Research

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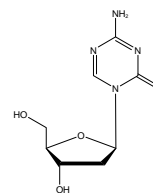
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Decitabine

Cat. No.	Size	Price
BG0584	25 mg	220 €

4-Amino-1-(2-deoxy-β-D-erythro-pentofuranosyl)-1,3,5-triazin-2(1H)-one; *Dacogen*; 5-Aza-2'-deoxycytidine; NSC 127716
M.W. 228.21 C₈H₁₂N₄O₄ [2353-33-5] Store at +4° C
Soluble to 50 mM in water or to 50 mM in DMSO

A cytosine nucleoside (cytidine) analog that hypomethylates DNA by inhibiting DNA methyltransferase. It is indicated for the treatment of myelodysplastic syndromes (MDS).



Reference

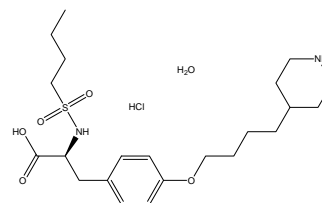
1. Jackson-Grusby et al. (1997) *Proc Natl Acad Sci USA* 94:4681; 2. Bender et al. (1998) *Cancer Res* 58:95; 3. Momparler (2005) *Semin Hematol* 42 Suppl. 2:S9; 4. Santos et al. (2010) *Expert Rev Anticancer Ther* 10:9

Tirofiban hydrochloride

Cat. No.	Size	Price
BG0585	10 mg	155 €

N-(Butylsulfonyl)-*O*-[4-(4-piperidinyl)butyl]-*L*-tyrosine hydrochloride hydrate; *Aggrestat*
M.W. 495.07 C₂₇H₃₆N₂O₅S ·HCl ·H₂O [150915-40-5] Store at +4° C
Soluble to 100 mM in DMSO or ethanol

A specific nonpeptide platelet fibrinogen receptor (GpIIb/IIIa) antagonist. An antithrombotic agent used in the treatment of unstable angina.



Reference

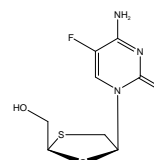
1. Barrett et al. (1994) *Clin Pharmacol Ther* 56:377; 2. Lynch et al. (1995) *J Pharmacol Exp Ther* 272:20; 3. Theroux et al. (1998) *N Engl J Med* 338:1488

Emtricitabine

Cat. No.	Size	Price
BG0586	25 mg	250 €

4-Amino-5-fluoro-1-[(2*R*,5*S*)-2-(hydroxymethyl)-1,3-oxathiolan-5-yl]-1,2-dihydropyrimidin-2-one; *Emtriva*; *Coviracil*
M.W. 247.25 C₈H₁₀FN₃O₃S [143491-57-0] Store at +4° C
Soluble to 100 mM in DMSO or ethanol

Anti-HIV agent. A nucleoside reverse transcriptase inhibitor (NRTI) for the treatment of HIV infection in adults and children.



Reference

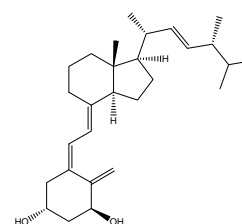
1. Frampton and Perry (2005) *Drugs* 65:1427; 2. Saag (2006) *Clin Infect Dis* 42:126

Doxercalciferol

Cat. No.	Size	Price
BG0587	1 mg	142 €

1α-Hydroxyergocalciferol; 1α-OHD₂; 1-α-Hydroxyvitamin D₂; 1-Hydroxyergocalciferol; *TSA 840*
M.W. 412.65 C₂₈H₄₄O₂ [54573-75-0] Desiccate at -20° C
Soluble to 50 mM in ethanol or DMSO

A vitamin D₂ analogue and vitamin D receptor activator (VDRA). It acts as a pro-hormone, needing 25-hydroxylation in the liver for bioactivation into 1α, 25-hydroxyvitamin D₂.



Reference

1. Brown et al. (2006) *Nephrol Dial Transplant* 21:644; 2. Kubodera (2009) *Molecules* 14:3869

Docetaxel

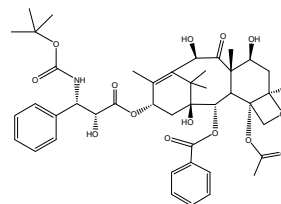
Cat. No.	Size	Price
BG0588	25 mg	180 €

1,7β,10β-Trihydroxy-9-oxo-5β,20-epoxytax-11-ene-2α,4,13α-triyl 4-acetate 2-benzoate 13-((2R,3S)-3-((tert-butoxycarbonyl)amino)-2-hydroxy-3-phenylpropanoate); Taxotere

M.W. 807.88 C₄₃H₅₃NO₁₄ [114977-28-5] Desiccate at +4° C

Soluble to 25 mM in ethanol or to 100 mM in DMSO

Antitumour agent that promotes and stabilises tubulin polymerisation. It is used mainly for the treatment of breast, ovarian, and non-small cell lung cancer. A derivative of paclitaxel (Taxol) (Cat. No. BG0088).



Reference

1. Pazdur et al. (1993) *Cancer Treat Rev* 19:351; 2. Saloustros and Georgoulas (2008) *Expert Rev Anticancer Ther* 8:1207; 3. Nishiyama and Wada (2009) *Gastric Cancer* 12:132

16α-Hydroxyprednisolone

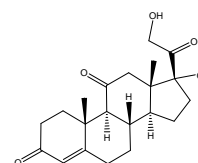
Cat. No.	Size	Price
BG0589	25 mg	120 €

(11b,16a)-11,16,17,21-Tetrahydroxy-Pregna-1,4-diene-3,20-dione

M.W. 376.44 C₂₁H₂₈O₆ [13951-70-7] Store at RT

Soluble in ethanol or DMSO

Major metabolite of budesonide, a glucocorticoid steroid for the treatment of asthma, non-infectious rhinitis (including hay fever and other allergies), and for treatment and prevention of nasal polyposis.



Reference

1. Wang et al. (2003) *Biomed Chromatogr* 17:158

Penciclovir

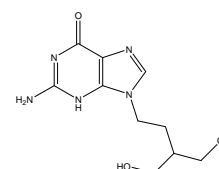
Cat. No.	Size	Price
BG0590	50 mg	150 €

2-Amino-9-[4-hydroxy-3-(hydroxymethyl)butyl]-6,9-dihydro-3H-purin-6-one; Famvir

M.W. 253.26 C₁₀H₁₅N₅O₃ [39809-25-1] Desiccate at RT

Soluble to 100 mM in DMSO or in ethanol

A guanine analogue antiviral drug used for the treatment of various herpesvirus infections. It exhibits low toxicity and good selectivity. It is inactive in its initial form. Within a virally infected cell a viral thymidine kinase adds a phosphate group to the penciclovir molecule; this is the rate-limiting step in the activation of penciclovir. See also Acyclovir (Cat. No. BG0016).



Reference

1. Bacon et al. (2003) *Clin Microbiol Rev* 16:114; 2. Schmid-Wendtner and Korting (2004) *Skin Pharmacol Physiol* 17:214

Zafirlukast

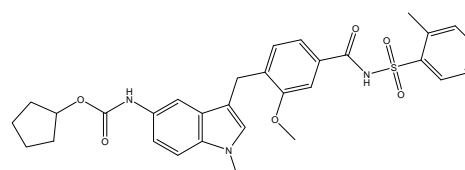
Cat. No.	Size	Price
BG0591	50 mg	120 €

N-[3-[[[2-Methoxy-4-[[[(2-methylphenyl)sulfonyl]amino]carbonyl]phenyl]methyl]-1-methyl-1H-indol-5-yl]carbamic acid cyclopentyl ester; Accolate; Accoleit; Vanticon

M.W. 575.68 C₃₁H₃₃N₃O₆S [107753-78-6] Desiccate at RT

Soluble to 100 mM in DMSO or in ethanol

A potent subtype specific Cysteinyl leukotriene type 1 receptor (CysLT₁) antagonist. It has over 1000-fold selectivity for CysLT₁, one of two receptors for cysteinyl leukotrienes LTC₄, LTD₄, and LTE₄, which are important mediators of human bronchial asthma. Antiasthmatic agent.



Reference

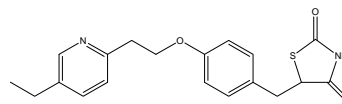
1. Adkins and Brogden (1998) *Drugs* 55:121; 2. Dunn and Goa (2001) *Drugs* 61:285

Pioglitazone

Cat. No.	Size	Price
BG0592	100 mg	240 €

(*RS*)-5-(4-[2-(5-ethylpyridin-2-yl)ethoxy]benzyl)thiazolidine-2,4-dione; *Glustin; Glizone; Pioz*
M.W. 356.44 C₁₉H₂₀N₂O₃S [111025-46-8] Desiccate at RT
Soluble to 100 mM in DMSO or in ethanol

Selective PPAR γ agonist. It is used for the treatment of diabetes mellitus type 2 in monotherapy and in combination with a sulfonylurea, metformin or insulin. Antihyperglycemic agent.



Reference

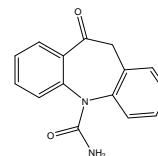
1. Gillies and Dunn (2000) *Drugs* 60:333; 2. Shah and Mudaliar (2010) *Expert Opin Drug Saf* 9:347

Oxcarbazepine

Cat. No.	Size	Price
BG0593	25 mg	65 €

10,11-Dihydro-10-oxo-5H-dibenzo[b,f]azepine-5-carboxamide; *Trileptal*
M.W. 252.27 C₁₅H₁₂N₂O₂ [28721-07-5] Desiccate at RT
Soluble to 50 mM in DMSO or in ethanol

Anticonvulsant agent used primarily in the treatment of epilepsy. A sodium channel blocker that stabilizes the inactivated state of sodium channels (see also Carbamazepine Cat. No. BG0497). It protects mice and rats against generalized tonic-clonic seizures induced by electroshock.



Reference

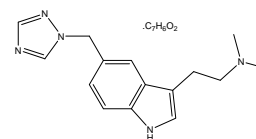
1. Schmutz et al. (1994) *Epilepsia* 35:S47; 2. Ambrosio et al. (2002) *Neurochem Res* 27:121; 3. Zheng et al. (2009) *Epilepsia* 50:83

Rizatriptan benzoate

Cat. No.	Size	Price
BG0594	100 mg	150 €

N,N-Dimethyl-2-[5-(1*H*-1,2,4-triazol-1-ylmethyl)-1*H*-indol-3-yl]ethanamine benzoate; *Maxalt*
M.W. 391.47 C₁₅H₁₉N₅·C₇H₆O₂ [145202-66-0] Desiccate at RT
Soluble to 100 mM in DMSO or in ethanol

Selective 5-HT_{1B/1D} receptor agonist (K_i values are 12.5 nM at 5-HT_{1B} and 12 nM at 5-HT_{1D} receptors). It is used in the treatment of migraines. See also Sumatriptan (Cat. No. BG0326).



Reference

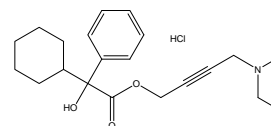
1. Napier et al. (1999) *Eur J Pharmacol* 368:259; 2. Mannix (2008) *Expert Opin Pharmacother* 9:1001; 3. Hargreaves et al. (2009) *Headache* 49 Suppl 1:S3

Oxybutynin hydrochloride

Cat. No.	Size	Price
BG0595	100 mg	75 €

α -Phenylcyclohexaneglycolic acid 4-(diethylamino)-2-butynyl ester hydrochloride; *Ditropan, Lyrinel XL*
M.W. 393.95 C₂₂H₃₁NO₃·HCl [1508-65-2] Desiccate at +4° C
Soluble to 50 mg/ml in water

Muscarinic acetylcholine receptor antagonist (pK_i values are 8.7 and 7.6 at M₃ and M₅ receptors, respectively) and a muscarinic M₂ inverse agonist (pK_i = 7.7). It inhibits proliferation of bladder smooth muscle cells, possibly due to a downregulation of growth promoting genes.



Reference

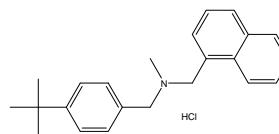
1. Watson et al. (1999) *Br J Pharmacol* 1999 127:590; 2. Park et al. (1999) *J Urol* 162:1110; 3. Tupker et al. (2006) *Arch Dermatol* 142:1065; 4. Nelson et al. (2006) *J Pharmacol Exp Ther* 316:279

Butenafine hydrochloride

Cat. No.	Size	Price
BG0596	100 mg	95 €

N-[[4-(1,1-Dimethylethyl)phenyl]methyl]-*N*-methyl-1-naphthalenemethanamine hydrochloride; Mentax; Butop; Lotrimin Ultra
M.W. 353.93 C₂₃H₂₇N.HCl [101827-46-7] Store at RT
Soluble to 10 mg/ml in DMSO and ethanol or slightly soluble in water

A synthetic antifungal agent. A squalene epoxidase inhibitor, inhibits the synthesis of ergosterol needed in fungal cell membranes. It is highly lipophilic in nature and tends to accumulate in skin, nails and fatty tissues. See also Terbinafine (Cat. No. BG0443).



Reference

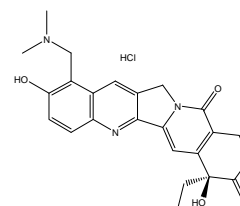
1. Syed and Maibach (2000) *Expert Opin Pharmacother* 1:467; 2. Singal (2008) *Expert Opin Drug Metab Toxicol* 4:999

Topotecan hydrochloride

Cat. No.	Size	Price
BG0599	25 mg	85 €

9-[(Dimethylamino)methyl]-10-hydroxy-(20*S*)-camptothecin hydrochloride; Hycamptamine hydrochloride; NSC-609669; SKF-104864A; Hycamtin
M.W. 457.91 C₂₃H₂₃N₃O₅.HCl [119413-54-6] Desiccate at +4° C
Soluble to 25 mg/ml in DMSO or ethanol

A topoisomerase I inhibitor and apoptosis inducer. Potent antitumour agent that is used to treat ovarian cancer and lung cancer, as well as other cancer types. A water-soluble derivative of camptothecin (Cat. No. BG0120).



Reference

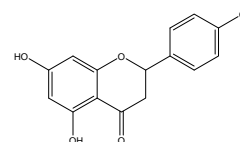
1. Ackermann et al. (2007) *Int J Gynecol Cancer* 17:1215; 2. Loveman et al. (2010) *Health Technol Assess* 14:1

Naringenin

Cat. No.	Size	Price
BN0800	100 mg	75 €

5,7-Dihydroxy-2-(4-hydroxyphenyl)chroman-4-one
M.W. 272.25 C₁₅H₁₂O₅ [480-41-1] Store at RT
Soluble to 100 mM in water

A naturally occurring citrus flavonone. It has shown cytotoxicity in various human cancer cell lines as well as inhibitory effects on tumour growth. Also promotes apoptosis in cerebrally implanted C6 glioma cells. It prevents dyslipidemia, apolipoprotein B overproduction, and hyperinsulinemia in LDL receptor-null mice with diet-induced insulin resistance.



Reference

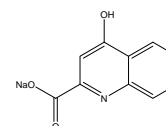
1. Mulvihill et al. (2009) *Diabetes* 58:2198; 2. Sabarinathan et al. (2010) *Mol Cell Biochem* 345:215

Kynurenic acid sodium salt

Cat. No.	Size	Price
BN0801	1 g	79 €

4-Hydroxyquinoline-2-carboxylic acid sodium salt
M.W. 211.15 C₁₀H₆NNaO₃ [492-27-3] (free acid) Desiccate at RT
Soluble to 100 mM in water

Excitatory amino acid (EAA) receptor antagonist. Blocks kainic acid-induced neurotoxicity. Also a GPR35 receptor agonist. Water-soluble form of Kynurenic acid (Cat. No. BN0283).



Reference

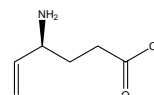
1. Stone (1993) *Neuropharmacology* 45:309; 2. Behan and Stone (2000) *Br J Pharmacol* 129:1764; 3. Taniguchi et al. (2008) *Pharmacology* 82:245

(S)-Vigabatrin

Cat. No.	Size	Price
BN0802	10 mg	220 €

4(S)-Aminohexenoic acid; (+)- γ -Vinyl GABA; (S)-(+)-Vigabatrin
M.W. 129.16 C₆H₁₁NO₂ [74046-07-4] Desiccate at +4° C
Soluble to 100 mM in water

Anticonvulsant agent. Active enantiomer of Vigabatrin (Cat. No. BN0538). Selective and irreversible GABA-transaminase (GABA-T) inhibitor that greatly increases whole-brain levels of GABA.



Reference

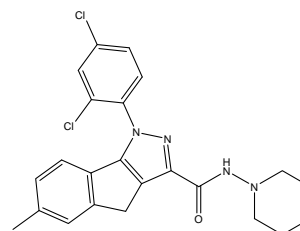
1. Larsson et al. (1986) *Neuropharmacology* 25:617; 2. Halonen et al. (1991) *Epilepsia* 32:242; 3. Smid et al. (1996) *J Pharmacol Exp Ther* 276:977; 4. Willmore et al. (2009) *Epilepsia* 50:163

Gp 1a

Cat. No.	Size	Price
BN0803	10 mg	135 €

N-(Piperidin-1-yl)-1-(2,4-dichlorophenyl)-1,4-dihydro-6-methylindeno[1,2-c]pyrazole-3-carboxamide
M.W. 441.35 C₂₃H₂₂Cl₂N₄O Store at RT
Soluble to 100 mM in DMSO or to 100 mM in ethanol

Selective and potent CB₂ receptor agonist (K_i values are 0.037 nM and 363 nM for CB₂ and CB₁ receptors respectively). It increases P-ERK1/2 expression in HL-60 cells *in vitro*.



Reference

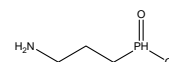
1. Murineddu et al. (2006) *J Med Chem* 49:7502; 2. Tschop et al. (2009) *J Immunol* 183:499

3-APPA

Cat. No.	Size	Price
BN0804	10 mg	138 €

3-Aminopropylphosphinic acid; CGP 27492; CGP-27492
M.W. 123.09 C₃H₁₀NO₂P [103680-47-3] Desiccate at +4° C
Soluble to 100 mM in water

Potent, selective GABA_B agonist (IC₅₀ = 5 nM) displaying partial agonist activity.



Reference

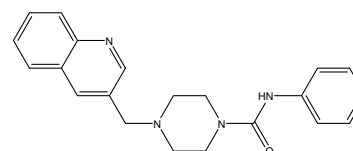
1. Ong et al. (1990) *Brain Res* 526:138; 2. Seabrook et al. (1990) *Br J Pharmacol* 101:949; 3. Hirst et al. (2003) *Biochem Pharmacol* 65:1103

PF 622

Cat. No.	Size	Price
BN0805	5 mg	123 €

N-Phenyl-4-(quinolin-2-ylmethyl)piperazine-1-carboxamide; PF-622
M.W. 346.43 C₂₁H₂₂N₄O [898235-65-9] Store at RT
Soluble to 100 mM in DMSO or to 100 mM in ethanol

Potent and selective fatty acid amide hydrolase (FAAH) inhibitor (IC₅₀ = 33 nM) displaying selectivity for FAAH relative to other mammalian serine hydrolases. See also PF 750 (Cat. No. BN0790).



Reference

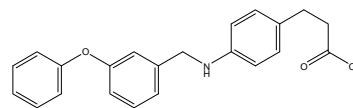
1. Ahn et al. (2007) *Biochemistry* 46:13019

GW 9508

Cat. No.	Size	Price
BN0806	10 mg	110 €

4-[[[3-Phenoxyphenyl)methyl]amino]benzene propanoic acid; GW-9508; GW9508
M.W. 347.41 C₂₂H₂₁NO₃ [885101-89-3] Store at RT
Soluble to 15 mg/ml in DMSO or ethanol

Potent GPR40 receptor agonist. It enhances insulin secretion in INS-1E cells and activates ATP-sensitive potassium channels in rat pancreatic β cells (40 μ M). GPR40 was formerly an orphan GPCR whose endogenous ligands have been shown to be free fatty acids and has therefore been designated the free fatty acid receptor 1 (FFAR1).



Reference

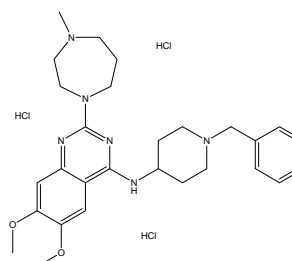
1. Itoh et al. (2003) *Nature* 422:173; 2. Briscoe et al. (2006) *Br J Pharmacol* 148:619; 3. Zhao et al. (2008) *J Endocrinol* 198:533; 4. Yang et al. (2010) *Mol Cell Endocrinol* 315:308

BIX 01294

Cat. No.	Size	Price
BN0807	10 mg	143 €

2-(Hexahydro-4-methyl-1H-1,4-diazepin-1-yl)-6,7-dimethoxy-N-[1-(phenylmethyl)-4-piperidinyl]-4-quinazolinamine trihydrochloride; BIX01294
M.W. 600.02 C₂₈H₃₈N₆O₂ .3HCl [935693-62-2] Desiccate at RT
Soluble to 100 mM in water or to 100 mM in DMSO

G9a-like protein and G9a histone lysine methyltransferase (HMTase) inhibitor (IC₅₀ values are 0.7 and 1.7 μ M respectively) displaying no activity at other HTMases up to 37 μ M. It has been used in combination with the calcium channel activator Bay K 8644 (Cat. No. BN0100) to facilitate the generation of induced pluripotent stem cells from somatic cells *in vitro*.



Reference

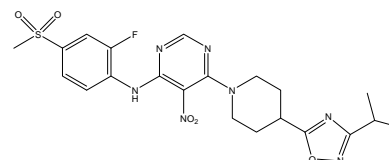
1. Kubicek et al. (2007) *Mol Cell* 25:473; 2. Shi et al. (2008) *Cell Stem Cell* 3:568; 3. Chang et al. (2009) *Nat Struct Mol Biol* 16:312

AR231453

Cat. No.	Size	Price
BN0808	5 mg	94 €

2-Fluoro-4-methanesulfonyl-phenyl)-{6-[4-(3-isopropyl-[1,2,4]oxadiazol-5-yl)-piperidin-1-yl]-5-nitro-pyrimidin-4-yl]-amine; AR-231453;
AR 231453
M.W. 505.52 C₂₁H₂₄FN₇O₅S [733750-99-7] Store at RT
Soluble to 25 mg/ml in DMSO or ethanol

High potent and selective GPR119 agonist (EC₅₀ = 0.68 nM). It displays *in vivo* activity in rodents and is active in a glucose tolerance test in mice following oral administration. Also stimulates the release of GLP-1 via GPR119 receptors in mouse models.



Reference

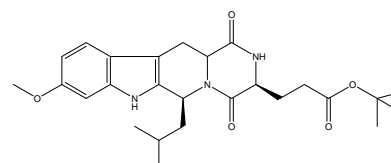
1. Overton et al. (2006) *Cell Metabol* 3:167; 2. Chu et al. (2008) *Endocrinology* 149:2038; 3. Semple et al. (2008) *J Med Chem* 51:5172; 4. Chu et al. (2010) *Mol Endocrinol* 24:161

Ko143

Cat. No.	Size	Price
BN0809	5 mg	95 €

(3S,6S,12aS)-1,2,3,4,6,7,12,12a-Octahydro-9-methoxy-6-(2-methylpropyl)-1,4-dioxypyrazino-[1',2':1,6]pyrido[3,4-b]indole-3-propanoic acid 1,1-dimethylethyl ester; Ko-143; Ko 143
M.W. 469.57 C₂₆H₃₅N₃O₅ [461054-93-3] Store at RT
Soluble to 25 mg/ml in DMSO or to 25 mg/ml in ethanol

Potent and selective inhibitor of the breast cancer resistance protein multidrug transporter (BCRP), displaying an EC₉₀ value of 26 nM. Novel analogue of the fungal toxin fumitremorgin C.



Reference

1. Allen et al. (2002) *Mol Cancer Ther* 1:417; 2. Matsson et al. (2009) *Pharm Res* 26:1816; 3. Chen et al. (2009) *J Pharmacol Exp Ther* 330:956

Reversine

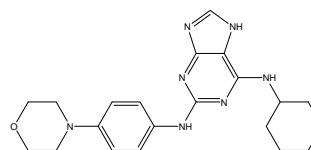
Cat. No.	Size	Price
BN0810	5 mg	160 €

2-(4-Morpholinoanilino)-6-cyclohexylaminopurine

M.W. 393.49 C₂₁H₂₇N₇O [656820-32-5] Store at -20° C

Soluble to 10 mg/ml in DMSO or ethanol

A potent, selective A₃ adenosine receptor antagonist (K_i = 0.66 μM). Induces dedifferentiation in murine C2C12 myoblasts (cells regain multipotency following removal of the compound). Also inhibits aurora kinase (IC₅₀ values are 30 - 550 nM; inhibitor of colony formation of human myeloid leukemia cells).



Reference

1. Chen et al. (2004) JACS 126:410; 2. Perreira et al. (2005) J Med Chem 48:4910; 3. D'Alise et al. (2008) Mol Cancer Ther 7:1140

Biphenylindanone A (BINA)

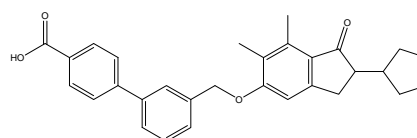
Cat. No.	Size	Price
BN0811	10 mg	Enquire

3'-((2-Cyclopentyl-6,7-dimethyl-1-oxo-2,3-dihydro-1H-inden-5-yl)oxy)methyl)biphenyl-4-carboxylic acid; BINA; LS-193,571

M.W. 454.56 C₃₀H₃₀O₄ Desiccate at RT

Soluble to 100 mM in DMSO or ethanol

A potent and selective positive allosteric modulator (PAM) for the group II metabotropic glutamate receptor subtype mGluR2. In animal studies it shows anxiolytic and antipsychotic effects. It has been suggested as novel class of drugs for schizophrenia treatment. It decreases cocaine self-administration and cue-induced cocaine-seeking and counteracts cocaine-induced enhancement of brain reward function in rats.



Reference

1. Galici et al. (2006) J Pharmacol Exp Ther 318:173; 2. Benneyworth et al. (2007) Mol Pharmacol 72:477; 3. Jin et al. (2010) Neuropsychopharmacology 35:2021

Brevetoxin PbTx-2

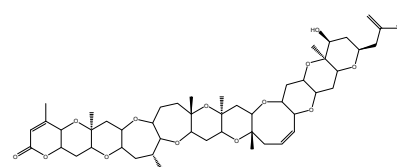
Cat. No.	Size	Price
BN0812	100 μg	260 €

PbTx-2; Brevetoxin B; GbTx-2

M.W. 895.08 C₅₀H₇₀O₁₄ [79580-28-2] Desiccate at -20° C

Soluble in DMSO or ethanol

Na⁺ channel activator, it binds to site 5 of the voltage-gated Na⁺ channel in nerve cells, leading to channel activation. This leads to disruption of normal neurological processes and causes the illness clinically described as neurotoxic shellfish poisoning.



Reference

1. LePage et al. (2005) Crit Rev Neurobiol 17:27; 2. Watkins et al. (2008) Mar Drugs 6:431

Epothilone B

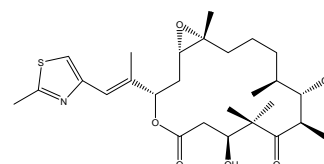
Cat. No.	Size	Price
BN0813	1 mg	190 €

(1S,3S,7S,10R,11S,12S,16R)-7,11-Dihydroxy-8,8,10,12,16-pentamethyl-3-((E)-1-(2-methylthiazol-4-yl)prop-1-en-2-yl)-4,17-dioxabicyclo[14.1.0]heptadecane-5,9-dione; EPO-906; EpoB; Patupilone

M.W. 507.68 C₂₇H₄₁NO₆S [152044-54-7] Desiccate at -20° C

Soluble to 40 mg/ml in DMSO or to 40 mg/ml in ethanol

Antitumour agent that promotes and stabilises tubulin polymerisation. Like taxanes, they prevent cancer cells from dividing by interfering with tubulin, but in early trials epothilones have better efficacy and milder adverse effects than taxanes. It causes cell cycle arrest at the G2-M transition (EC₅₀ = 32 nM for Hela cells and 3 nM for Hs578T) similar to paclitaxel (Taxol) (Cat. No. BG0088). A new class of cancer drugs.



Reference

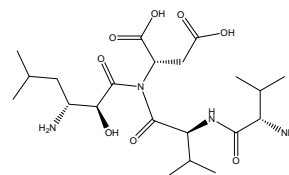
1. Nicolaou et al. (1997) J Am Chem Soc 119: 7974; 2. Bollag et al. (2000) Cancer Res 55:2325; 3. Molnar et al. (2010) Chem Biol 7:97

Amastatin

Cat. No.	Size	Price
BP0404	500 µg	75 €

[(2S,3R)-3-Amino-2-hydroxy-5-methyl-hexanoyl]-L-valyl-L-valyl-L-aspartic acid
M.W. 474.55 C₂₁H₃₈N₄O₈ [67655-94-1] Desiccate at -20° C
Soluble in water

A competitive protease inhibitor for human serum aminopeptidase A (K_i = 1.1 µM), aminopeptidase M and leucine aminopeptidase (K_i = 1.6 µM, pig kidney). It can be used in combination with EDTA for the stabilization of endogenous, biologically active peptides in plasma or serum as well as in whole blood.



Reference

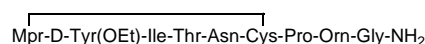
1. Aoyagi et al. (1978) *J Antibiotics* 31:636; 2. Tobe et al. (1982) *Agric Biol Chem* 46:1865; 3. Hiranuma et al. (1997) *J Pharmacol Exp Ther* 281:769

Atosiban

Cat. No.	Size	Price
BP0405	10 mg	130 €

1-(3-Mercaptopropanoic acid)-2-(O-ethyl-D-tyrosine)-4-L-threonine-8-L-ornithineoxytocin; *Tractocile*; 1-Deamino-2-D-Tyr-(O-ethyl)-4-Thr-8-ornoxytocin
M.W. 994.19 C₄₃H₆₇N₁₁O₁₂S₂ [90779-69-4] Desiccate at -20° C
Soluble in water

Oxytocin receptor (OT) agonist. Neurohypophyseal peptide that stimulates uterine contraction and lactation. Increases Na⁺ excretion and stimulates myometrial GTPase and phospholipase C. See also Oxytocin (Cat. No. BP0220).



Reference

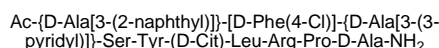
1. Tahara et al. (2000) *Br J Pharmacol* 129:131; 2. Engstrom et al. (2000) *Biol Reprod* 63:1443; 3. Wex et al. (2009) *BMC Pregnancy Childbirth* 9:23

Cetrorelix acetate

Cat. No.	Size	Price
BP0406	5 mg	120 €

Cetrotide; NS-75A; SB-75
M.W. 1431.04 (free base) C₇₀H₉₂ClN₁₇O₁₄ .xC₂H₄O₂ [145672-81-7] Desiccate at -20° C
Soluble in water

A luteinizing hormone-releasing hormone (LHRH) antagonist. It competitively inhibits LHRH receptor in the pituitary gland to suppress ovarian and testicular functions. LHRH is also called Gonadotropin-Releasing Hormone (GnRH) or Luteinizing Hormone-Releasing Factor (LRF).



Reference

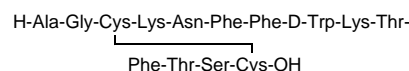
1. Reissmann et al. (2000) *Hum Reprod Update* 6:322; 2. Chou et al. (2003) *J Clin Endocrinol Metab* 88:3806; 3. Finas et al. (2006) *Expert Opin Pharmacother* 7:2155

[D-Trp⁸]Somatostatin

Cat. No.	Size	Price
BP0407	1 mg	70 €

M.W. 1638.1 C₇₆H₁₀₄N₁₈O₁₉S₂ [58976-64-8] Desiccate at -20° C
Soluble to 1 mg/ml in water

Somatostatin analogue agonist that is 6-8 times more potent than somatostatin-14 (Cat. No. BP0263) in inhibiting the release of growth hormone, glucagon and insulin.



Reference

1. Rivier et al. (1975) *BBRC* 65:746

Cyclo-Somatostatin

Cat. No.	Size	Price
BP0408	1 mg	119 €

Somatostatin antagonist

M.W. 780.0 C₄₄H₅₇N₇O₆ [84211-54-1] Desiccate at -20° C
Soluble to 1 mg/ml in 20% Acetonitrile in water

Non-selective somatostatin (sst) receptor antagonist. It inhibits the effects of sst in inhibiting the release of growth hormone, glucagon and insulin.

c[Aminoheptanoyl-Phe-DTrp-Lys-Thr(Bzl)]

Reference

1. Fries et al. (1982) *Peptides* 3:811

Antide

Cat. No.	Size	Price
BP0409	1 mg	109 €

Iturelix; ORF 23541

M.W. 1591.32 C₈₂H₁₀₈ClN₁₇O₁₄ [112568-12-4] Desiccate at -20° C
Soluble in water

A luteinizing hormone-releasing hormone (LHRH) antagonist with high anti-ovulatory and negligible histamine release activity. It competitively inhibits LHRH receptor in the pituitary gland to suppress ovarian and testicular functions. LHRH is also called Gonadotropin-Releasing Hormone (GnRH) or Luteinizing Hormone-Releasing Factor (LRF).

Ac-D-Nal-D-(p-Cl)Phe-D-Pal-Ser-Lys(nicotinoyl)-D-Lys(nicotinoyl)-Leu-Lys(isopropyl)-Pro-D-Ala-NH₂

Reference

1. Ljungqvist et al. (1987) *Biochem Biophys Res Commun* 148:849; 2. Ljungqvist et al. (1988) *Proc Natl Acad Sci USA* 85:8236; 3. Leal et al. (1991) *Drugs Future* 16:529; 4. Rivier et al. (1992) *J Med Chem* 35:4270; 5. Hong et al. (2008) *J Clin Endocrinol Meta*

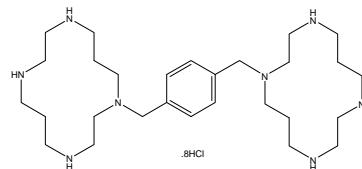
AMD 3100 octahydrochloride

Cat. No.	Size	Price
BS0286	10 mg	108 €

1,1'-[1,4-Phenylene-bis-(methylene)]-bis-(1,4,8,11-tetraazacyclotetradecane) octahydrochloride; Plerixafor; JM 3100; Mobozil; SID 791

M.W. 794.47 C₂₈H₅₄N₈ .8HCl [155148-31-5] Desiccate at -20° C
Soluble to 100 mM in water

Selective CXCR₄ chemokine receptor antagonist (IC₅₀ values are 0.02 - 0.13 and > 25 μM for CXCR₄ and all other chemokine receptors respectively). Also potently inhibits HIV-1 and HIV-2 replication *in vitro* (EC₅₀ = 4 - 35 nM).



Reference

1. Bridger et al. (1995) *J Med Chem* 38:366; 2. Hatse et al. (2002) *FEBS Letts* 527:255; 3. Hogaboam et al. (2005) *Pharmacol Ther* 107:314; 4. DiPersio et al. (2009) *Nat Rev Drug Disc* 8:105