

Neurochemicals

Newsletter

Newsletter 5/2010

New Products for Neurosciences Research

Page 2

- BG0542 **Ceftibuten** - Antibiotic agent
- BG0543 **Rimantadine hydrochloride** - Antiviral agent
- BG0544 **Efonidipine hydrochloride** - Ca²⁺ channel (L-type/T-type) blocker
- BG0545 **Pergolide mesylate** - Dopamine D₁/D₂ receptor agonist

Page 3

- BG0546 **Pirarubicin** - Antitumour agent, DNA topoisomerase II inhibitor
- BG0547 **Ketorolac** - Selective cyclooxygenase COX-1 inhibitor
- BG0549 **Fexinidazole** - Broad spectrum anti-protozoal agent
- BG0550 **Ropinirole hydrochloride** - Selective D₂-like receptor agonist

Page 4

- BG0551 **Paliperidone** - Dopamine D₂/5-HT₂ receptor antagonist
- BG0552 **2-Chlorodeoxyadenosine** - Antitumour agent
- BG0553 **Abacavir sulfate** - Antiviral agent, reverse transcriptase inhibitor
- BG0554 **Ibutilide** - A Class III antiarrhythmic agent

Page 5

- BG0555 **Levosalbutamol** - Adrenergic β agonist, active enantiomer of Salbutamol
- BG0557 **Fosinopril sodium** - Angiotensin ACE inhibitor, antihypertensive agent
- BG0559 **Rasagiline mesylate** - Selective, irreversible MAO-B inhibitor
- BG0560 **Terguride** - A partial dopamine D₂ receptor agonist

Page 6

- BG0561 **Imiquimod** - Toll-like receptor 7 (TLR7) agonist, antitumour agent
- BG0562 **Eprosartan mesylate** - Selective, potent AT₁ receptor antagonist
- BG0563 **Losartan potassium** - Selective, potent AT₁ receptor antagonist
- BG0564 **Mexiletine hydrochloride** - Na⁺ channel blocker, class IB antiarrhythmic

Page 7

- BG0565 **Iloprost** - Second generation prostacyclin (PGI₂) analogue
- BG0567 **Epinastine** - Second generation histamine H₁ antagonist
- BN0775 **4-PPBP maleate** - A potent σ₁ receptor agonist
- BN0776 **AP-18** - TRPA1 channel blocker

Page 8

- BN0777 **Aniracetam** - Nootropic agent and PAM at AMPA receptors
- BN0779 **YM 202074** - Potent, selective allosteric mGlu₁ antagonist
- BN0780 **EMD 386088 hydrochloride** - Potent 5-HT₆ agonist
- BN0781 **JNJ 7777120** - Potent, selective histamine H₄ antagonist

Page 9

- BP0393 **Amylin amid (human)** - Amylin, Islet Amyloid Polypeptide (IAPP), DAP
- BP0394 **Glucagon (human)** - Endogenous glucagon agonist
- BP0395 **P518 orphan GPCR SP9155 agonist (human)** - Orphan GPCR SP9155 agonist
- BS0275 **ADMA dihydrochloride** - Endogenous nitric oxide synthase (NOS) inhibitor
- BS0276 **Ro 41-5253** - Selective RARα antagonist

Page 10

- BS0277 **SDMA** - Endogenous counterpart of ADMA (Cat. No. BS0275)
- BS0278 **TAK-165** - Potent, irreversible HER-2 inhibitor
- BS0279 **Cilostazol** - Potent phosphodiesterase 3A (PDE3A) inhibitor
- BS0280 **Olomoucine II** - Cyclin-dependent kinase cdk1 inhibitor

...distributed by:

ANAWA Trading SA
Unterdorfstrasse 21b
CH-8602 Wangen
Tel. +41 44 805 76 81
Fax. +41 44 805 76 75
hassler@anawa.ch
www.anawa.ch

BIOTREND Chemikalien GmbH
Im Technologiezentrum Köln
Eupener Str. 157 • D-50933 Köln
Tel. +49 221 949 83 20
Fax. +49 221 949 83 25
jaeger@biotrend.com
www.biotrend.com

BIO
TREND

BIOTREND Chemicals AG
Unterdorfstrasse 21b
CH-8602 Wangen
Tel. +41 44 805 76 76
Fax. +41 44 805 76 77
info@biotrend.ch
www.biotrend.ch

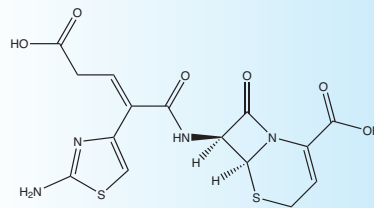
Ceftibuten

Cat.No.	Size	Price €
BG0542	250 mg	150,00

An advanced-generation, cephalosporin antibiotic agent with excellent and well balanced antibacterial activities against gram-positive and gram-negative bacteria.

Reference

1. Guay (1997) *Ann Pharmacother* 31:1022;
2. Owens et al. (1997) *Pharmacotherapy* 17:707



7-[2-(2-Amino-1,3-thiazol-4-yl)-4-carboxyisocrotonamide]-3-cephem-4-carboxylic acid; Cedax

M.W. 410.42 $C_{15}H_{14}N_4O_6S_2$

[97519-39-6] Store at RT

Soluble to 100 mM in DMSO or to 30 mM in ethanol

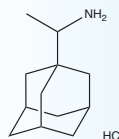
Rimantadine hydrochloride

Cat.No.	Size	Price €
BG0543	100 mg	48,00

Antiviral agent, its antiviral activity involves interference with a viral ion channel M2, which is required for the viral particle to become "uncoated" once taken inside a cell by endocytosis.

Reference

1. Govorkova et al. (2004) *Antimicrobial Agents Chemother* 48: 4855;
2. Jing et al. (2008) *Proc Natl Acad Sci USA* 105:10967



1-(1-Adamantyl)ethylamine hydrochloride; Flumadine

M.W. 215.76 $C_{12}H_{21}N \cdot HCl$

[1501-84-4] Store at RT

Soluble to 100 mM in DMSO or to 30 mM in ethanol

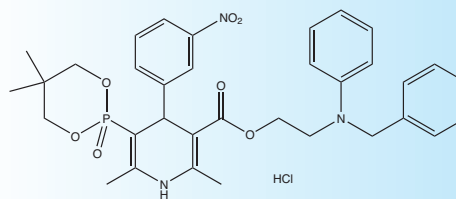
Efonidipine hydrochloride

Cat.No.	Size	Price €
BG0544	25 mg	225,00

1,4-Dihydropyridine-type Ca^{2+} channel blocker. Antihypertensive agent. A racemic compound that has some L-type as well as T-type calcium channel blocking activity. The R(-) isomer appears to be very selective for T-type calcium channel.

Reference

1. Toyoda et al. (1994) *Nippon Yakurigaku Zasshi* 103:231;
2. Shudo et al. (1994) *Gen Pharmacol* 25:1451



3-Pyridinecarboxylic acid, 5-(5,5-dimethyl-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-4-(3-nitrophenyl)-, 2-[phenyl(phenylmethyl)amino]ethyl ester, p-oxide, monohydrochloride; NZ-105; Landel

M.W. 668.12 $C_{34}H_{38}N_3O_7P \cdot HCl$

[111011-53-1] Store at +4 °C

Soluble to 5 mg/ml in DMSO or in ethanol

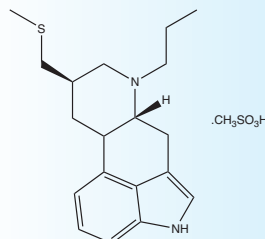
Pergolide mesylate

Cat.No.	Size	Price €
BG0545	50 mg	120,00

Dopamine D_1/D_2 receptor agonist and anti-Parkinsonian agent. It suppresses also the pituitary secretion of prolactin.

Reference

1. Fuller and Clemens (1991) *Life Sci* 49:925;
2. Hattori (2003) *Curr Opin Neurol* 16:S21;
3. Blin (2003) *Curr Opin Neurol* 16:S9



8β-[(Methylthio)methyl]-6-propylergoline methanesulfonate salt; LY 127809

M.W. 410.59 $C_{19}H_{26}N_2S \cdot CH_3SO_3H$

[66104-23-2] Store at -20 °C

Soluble to 5 mg/ml in DMSO or to 2 mg/ml in ethanol

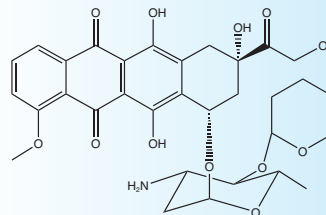
Pirarubicin

Cat.No.	Size	Price €
BG0546	10 mg	125,00

Anticancer antibiotic agent that inhibits DNA topoisomerase II. Immunosuppressive agent and DNA intercalator. See also Doxorubicin (Cat. No. BG0176).

Reference

1. Ramirez et al. (1993) *Br J Cancer* 68:277;
2. Okada et al. (1995) *Br J Cancer* 71:518



(9S)-7-[(2R,4S,5S,6S)-4-Amino-6-methyl-5-[(2R)-oxan-2-yl]oxyoxan-2-yl]oxy-6,9,11-trihydroxy-9-(2-hydroxyacetyl)-4-methoxy-8,10-dihydro-7H-tetracene-5,12-dione; THP-Adriamycin

M.W. 627.64 $C_{32}H_{37}NO_{12}$
[72496-41-4] Store at +4° C
Soluble to 100 mM in DMSO or to 30 mM in ethanol

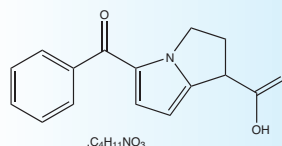
Ketorolac

Cat.No.	Size	Price €
BG0547	100 mg	65,00

Non-steroidal anti-inflammatory drug (NSAID) and relatively selective cyclooxygenase COX-1 inhibitor. It is often used as an analgesic, antipyretic and anti-inflammatory agent.

Reference

1. DeAndrade et al. (1994) *Orthopedics* 17:157;
2. Handley et al. (1998) *J Clin Pharmacol* 38:255



(RS)-5-Benzoyl-2,3-dihydro-1H-pyrrolizine-1-carboxylic acid tris salt; Ketorolac tromethamine; Toradol; Acular

M.W. 376.40 $C_{15}H_{13}NO_3 \cdot C_4H_{11}NO_3$
[74103-07-4] Store at +4° C
Soluble to 15 mg/ml in water or in ethanol

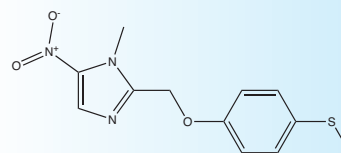
Fexinidazole

Cat.No.	Size	Price €
BG0549	100 mg	320,00

Broad-spectrum anti-protozoal agent. Recently, it was shown that it is orally active against both *Trypanosoma brucei* (T.b.) *T.b. gambiense* and *T.b. rhodesiense*.

Reference

1. Raether and Seidenrath (1983) *Ann Trop Med Parasitol* 77:13;
2. Jennings et al. (1996) *Trop Med Int Health* 1:590



1-Methyl-2-((4-(methylthio)phenoxy)methyl)-5-nitro-1H-imidazole; HOE 239

M.W. 279.31 $C_{12}H_{13}N_3O_3S$
[59729-37-2] Store at +4° C
Soluble in DMSO or ethanol

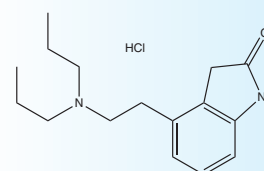
Ropinirole hydrochloride

Cat.No.	Size	Price €
BG0550	50 mg	230,00

Selective dopamine D₂-like receptor agonist (D₃ > D₂ > D₄). It is used in the treatment of Parkinson's disease and for the treatment of 'restless legs syndrome' (RLS).

Reference

1. Clarke and Deane (2001) *Cochrane Database Syst Rev* 2001; (1):CD001517;
2. Bogan (2008) *Expert Opin Pharmacother*
3. Varga et al. (2009) *J Clin Pharm Ther* 34:493



4-[2-(Dipropylamino)ethyl]-1,3-dihydro-2H-indol-2-one hydrochloride

M.W. 296.84 $C_{16}H_{24}N_2O \cdot HCl$
[91374-20-8] Store at +4° C
Soluble to 50 mM in DMSO or to 100 mM in water

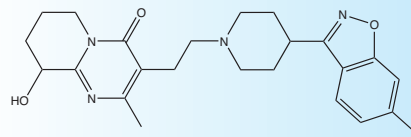
Paliperidone

Cat.No.	Size	Price €
BG0551	10 mg	130,00

Antipsychotic agent. Dopamine D₂ receptor antagonist and 5-HT₂ receptor antagonist. Active metabolite of Risperidone (Cat. No. BG0309).

Reference

1. Spina and Cavallaro (2007) *Expert Opin Drug Saf* 6:651;
2. Nussbaum and Stroup (2008) *Cochrane Database Syst Rev.* 2008 Apr 6; (2):CD006369



3-[2-[4-(6-Fluoro-1,2-benzisoxazol-3-yl)-1-piperidinyl]ethyl]-6,7,8,9-tetrahydro-9-hydroxy-2-methyl-4H-pyrido[1,2-a]pyrimidin-4-one; Invega; 9-Hydroxy-Risperidone

M.W. 426.48 C₂₃H₂₇FN₄O₃
[144598-75-4] Store at RT
Soluble to 50 mM in DMSO

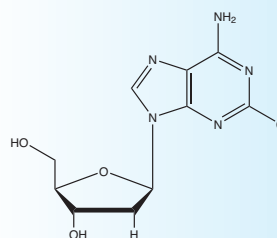
2-Chlorodeoxyadenosine

Cat.No.	Size	Price €
BG0552	50 mg	360,00

A purine nucleoside antimetabolite and antitumour agent. It is used to treat hairy cell leukemia (leukemic reticuloendotheliosis). It is under investigation for use in the treatment of multiple sclerosis.

Reference

1. Robak et al. (2007) *Blood* 109:3672;
2. Costello and Sipe (2008) *J Neurosci Nurs* 40:275;
3. Huynh et al. (2009) *Leuk Lymphoma* 50:12



5-(6-Amino-2-chloro-purin-9-yl)-2-(hydroxymethyl)oxolan-3-ol; Leustatin; Cladribine; 2-CDA

M.W. 285.69 C₁₀H₁₂ClN₅O₃
[4291-63-8] Store at RT
Soluble to 100 mM in DMSO or ethanol

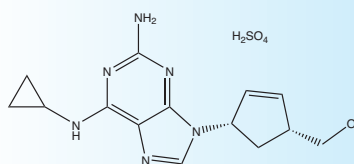
Abacavir sulfate

Cat.No.	Size	Price €
BG0553	50 mg	320,00

Anti-HIV agent. A nucleoside reverse transcriptase inhibitor (NRTI) with activity against human immunodeficiency virus Type 1 (HIV-1).

Reference

1. Hervey and Perry (2000) *Drugs* 60:447;
2. Dando and Scott (2005) *Drugs* 65:285



[(1S,4R)-4-[2-Amino-6-(cyclopropylamino)-9H-purin-9-yl]cyclopent-2-en-1-yl]methanol sulfate; Ziagen; ABC

M.W. 348.41 C₁₆H₁₈N₆O .H₂SO₄
[188062-50-2] Store at +4 °C
Soluble to 100 mM in DMSO or ethanol

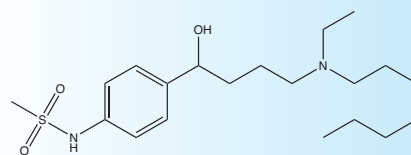
Ibutilide

Cat.No.	Size	Price €
BG0554	100 mg	310,00

A Class III antiarrhythmic agent. It binds to and alters the activity of hERG potassium channels, delayed inward rectifier potassium channels and L-type (dihydropyridine sensitive) calcium channels.

Reference

1. Howard (1999) *Ann Pharmacother* 33:38;
2. Daggrell and Hancox (2005) *Expert Opin Investig Drugs* 14:655



N-[4-[(Ethyl-heptylamino)-1-hydroxybutyl]phenyl]methanesulfonamide

M.W. 384.58 C₂₀H₃₆N₂O₃S
[122647-32-9] Store at RT
Soluble to 100 mg/ml in water or in ethanol

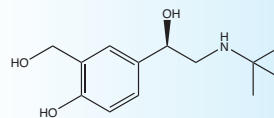
Levosabutamol

Cat.No.	Size	Price €
BG0555	50 mg	290,00

Non-selective β -adrenoceptor agonist that is more potent at β_2 - than at β_1 -adrenoceptors. It is the active enantiomer of Salbutamol (Cat. No. BG0312). A bronchodilator used to treat asthma and COPD.

Reference

1. Ormrod and Spencer (1999) *BioDrugs* 11:431;
2. Boulton and Fawcett (2001) *Clin Pharmacokinet* 40:23



4-[(1R)-2-(tert-Butylamino)-1-hydroxyethyl]-2-(hydroxymethyl)phenol; *Levalbuterol; Xopenex*

M.W. 239.31 $C_{13}H_{21}NO_3$
[34391-04-3] Store at RT
Soluble to 100 mM in DMSO or in ethanol

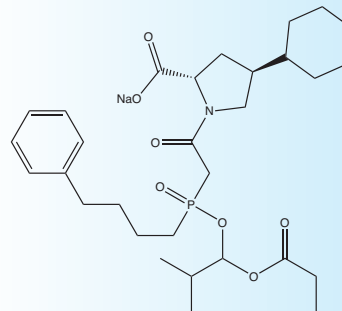
Fosinopril sodium

Cat.No.	Size	Price €
BG0557	50 mg	155,00

Antihypertensive agent. Fosinoprilat, the active metabolite, competes with angiotensin I for binding at the angiotensin-converting enzyme, blocking the conversion of angiotensin I to angiotensin II.

Reference

1. Duchin et al. (1991) *J Clin Pharmacol* 31:58;
2. Mancía et al. (1997) *Am J Hypertens* 10:236S



(2S,4S)-4-Cyclohexyl-1-([2-methyl-1-(propanoyloxy)propoxy](4-phenylbutyl)phosphoryl)acetylpyrrolidine-2-carboxylic acid sodium salt; *Dynacil; Fosinorm*

M.W. 585.64 $C_{30}H_{45}NO_7PNa$
[88889-14-9] Store at RT
Soluble to 100 mM in water

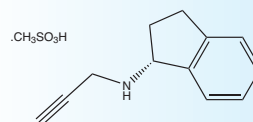
Rasagiline mesylate

Cat.No.	Size	Price €
BG0559	50 mg	120,00

Selective, irreversible monoamine oxidase B (MAO-B) inhibitor (selective for MAO-B over MAO-A by a factor of 14). It is used as a monotherapy in early Parkinson's disease or as an adjunct therapy in more advanced cases. Displays neuroprotective and anti-apoptotic effects.

Reference

1. Youdim et al. (2001) *Cell Mol Neurobiol* 21:555;
2. Mandel et al. (2005) *Brain Res Brain Res Rev* 48:379;
3. Malaty and Fernandez (2009) *Ther Clin Risk Manag* 5:413;
4. Weinreb et al. (2009) *Neurotherapeutics* 6:163



(1R)-2,3-Dihydro-N-2-propyn-1-yl-1H-inden-1-amine methanesulfonate; *Azilect*

M.W. 267.34 $C_{12}H_{13}N \cdot CH_3SO_3H$
[161735-79-1] Desiccate at +4 ° C
Soluble to 100 mM in water

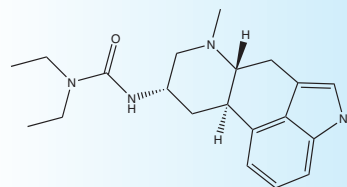
Terguride

Cat.No.	Size	Price €
BG0560	50 mg	280,00

A partial dopamine D_2 agonist. Recently it was granted orphan drug status for the treatment of pulmonary arterial hypertension.

Reference

1. Pulvirenti et al. (1998) *J Pharmacol Exp Ther* 286:1231;
2. Golda et al. (2001) *Physiol Res* 50:175;
3. Kalda et al. (2009) *Behav Brain Res* 202:232



N,N-Diethyl-N'-[(8 α)-6-methylergolin-8-yl]urea; *Dironyl; VUFB 6638*

M.W. 340.46 $C_{20}H_{28}N_4O$
[37686-84-3] Desiccate at +4 ° C
Soluble to 100 mM in DMSO or in ethanol

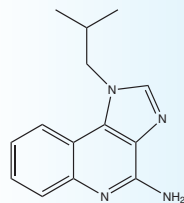
Imiquimod

Cat.No.	Size	Price €
BG0561	50 mg	55,00

Toll-like receptor 7 (TLR7) agonist, that stimulates proinflammatory cytokine production and activates NF- κ B. Also a caspase 3 activator, displaying antitumour activity related to apoptosis induction. It has anti-angiogenic, anti-inflammatory, and anti-viral activities. It increases IFN- β production and reduces the severity of experimental autoimmune encephalomyelitis. It upregulates the opioid growth factor receptor to inhibit cell proliferation independent of immune function.

Reference

1. Syed et al. (2001) *Exp Opin Pharmacother* 2:877;
2. Schon and Schon (2007) *Curr Med Chem* 14:681;
3. Averett et al. (2007) *Biochem Soc Trans* 35:1468;
4. Zagon et al. (2008) *Exp Biol Med* 233:968;
5. O'Brien et al. (2010) *J Neuroimmunol* 2010 Feb 4. [Epub ahead of print]



1-((2-Methylpropyl)-1H-imidazole[4,5-c]quinoline-4-amine; R 837

M.W. 240.30 $C_{24}H_{26}N_4$
[990011-02-6] Store at +4° C
Soluble to 4 mg/ml in DMSO or to 2 mg/ml in water

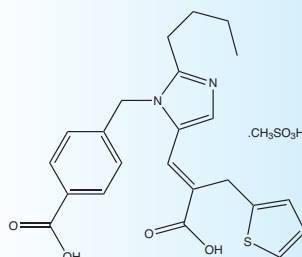
Eprosartan mesylate

Cat.No.	Size	Price €
BG0562	50 mg	285,00

Selective, potent AT₁ receptor antagonist (IC₅₀ = 1 - 3 nM). It antagonizes the effect of angiotensin II by blocking the angiotensin II receptor (AT₁ receptor) in vascular smooth muscle and the adrenal gland, producing decreased BP.

Reference

1. Vanderheyden et al. (1999) *Br J Pharmacol* 126:1057;
2. Plosker (2009) *Drugs* 69:2477



4-[[[2-Butyl-5-(2-carboxy-3-thiophen-2-yl-prop-1-enyl)-imidazol-1-yl]methyl]benzoic acid mesylate; Teveten

M.W. 520.62 $C_{23}H_{24}N_2O_4S \cdot CH_3SO_3H$
[144143-96-4] Store at RT
Soluble to 100 mM in DMSO or to 50 mM in ethanol

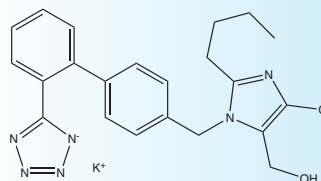
Losartan potassium

Cat.No.	Size	Price €
BG0563	100 mg	74,00

Selective, potent AT₁ receptor antagonist (IC₅₀ = 1 - 39 nM). It antagonizes the effect of angiotensin II by blocking the angiotensin II receptor (AT₁ receptor) in vascular smooth muscle and the adrenal gland, producing decreased BP.

Reference

1. Timmermans et al. (1993) *Pharmacol Rev* 45:205;
2. McIntyre et al. (1997) *Pharmacol Ther* 74:181;
3. Schwemmer et al. (2001) *Cardiovasc Drugs Ther* 15:301



2-Butyl-4-chloro-1-[[[2'-(1H-tetrazol-5-yl)[1,1'-biphenyl]-4-yl]methyl]-1H-imidazole-5-methanol monopotassium salt; Osaar; Lortaan; Cozaar

M.W. 461.00 $C_{22}H_{22}ClN_6OK$
[124750-99-8] Store at RT
Soluble to 100 mM in DMSO or in water or ethanol

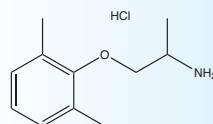
Mexiletine hydrochloride

Cat.No.	Size	Price €
BG0564	1 g	55,00

Na⁺ channel blocker and class IB antiarrhythmic agent. It is pharmacologically similar to Lidocaine (Cat. No. BG0236) and displays some anticonvulsant properties.

Reference

1. Jarvis and Coukell (1998) *Drugs* 56:691



1-(2,6-Xylyloxy)-2-aminopropane hydrochloride

M.W. 215.72 $C_{11}H_{17}NO \cdot HCl$
[31828-71-4] Store at RT
Soluble in water or ethanol

Iloprost

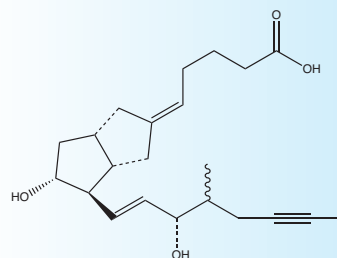
Cat.No.	Size	Price €
BG0565	1 mg	240,00

Second generation prostacyclin (PGI₂) analogue that binds with high affinity to IP, EP₁ and EP₃ receptors (K_i values are 11, 11, 56, 284, 619, 1035, 1870 and 6487 nM for IP, EP₁, EP₃, EP₄, FP, DP, EP₂ and TP receptors respectively). In whole animals, it acts as a vasodilator, hypotensive, antidiuretic, and prolongs bleeding time.

It has been evaluated in several human clinical studies as a treatment for idiopathic pulmonary hypertension.

Reference

- Schrör et al. (1981) *Naunyn-Schmiedeberg's Arch Pharmacol* 316:252;
- Della Bella et al. (2001) *Prostaglandins Other Lipid Mediat* 65:73;
- Abramovitz et al. (2000) *Biochim Biophys Acta* 1483:285;
- Hsu and Rubin (2005) *Expert Opin Pharmacother* 6:1921



(5E)-5-[(3aS,4R,5R,6aS)-Hexahydro-5-hydroxy-4-[(1E,3S)-3-hydroxy-4-methyl-1-octen-6-ynyl]-2(1H)-pentalenylidene]pentanoic acid; ZK 36374; Ciloprost

M.W. 360.49 C₂₂H₃₂O₄
[78919-13-8] Desiccate at -20° C
Soluble in ethanol, DMSO or methyl acetate

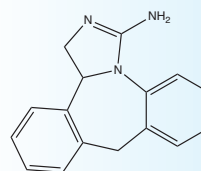
Epinastine

Cat.No.	Size	Price €
BG0567	100 mg	285,00

Second generation histamine H₁ antagonist and a mast-cell stabilizer that is used in eye drops to treat allergic conjunctivitis.

Reference

- Bielory et al. (2005) *Drugs* 65:215;
- Pradhan et al. (2009) *Expert Opinion on Drug Metabolism & Toxicology* 5:1135



(RS)-3-Amino-9,13b-dihydro-1H-dibenz(c,f)imidazo(1,5-a)azepine; Elestat; Relestat; Alesion; Flurinol

M.W. 249.31 C₁₆H₁₅N₃
[80012-43-7] Store at RT
Soluble to 100 mM in DMSO or to 50 mM in ethanol

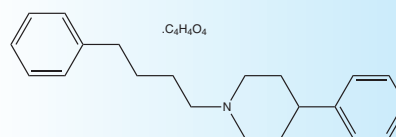
4-PPBP maleate

Cat.No.	Size	Price €
BN0775	10 mg	105,00

A potent σ_1 receptor agonist (K_i = 0.8 nM). Also a selective non-competitive antagonist at recombinant NR1a/2B NMDA receptors expressed in *Xenopus oocytes*.

Reference

- Glennon et al. (1991) *J Med. Chem* 34:3360;
- Whittemore et al. (1997) *J Pharmacol Exp Ther* 282:326;
- Schetz et al. (2007) *Brain Res* 1181:1;
- Yang et al. (2007) *Anesth Analg* 104:1179



4-Phenyl-1-(4-phenylbutyl)piperidine maleate

M.W. 409.52 C₂₁H₂₇N · C₄H₄O₄
[207572-62-1] Store at RT
Soluble to 25 mM in DMSO or to 25 mM in ethanol

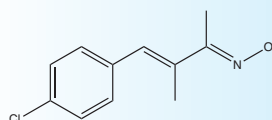
AP-18

Cat.No.	Size	Price €
BN0776	5 mg	78,00

A novel TRPA1 channel blocker (IC₅₀ = 3.1 μ M and 4.5 μ M in CHO cells and human/mouse cell lines, respectively). Displays no TRPV1, TRPV2, TRPV3, TRPV4 or TRPM8 channel inhibition at concentrations up to 50 μ M.

Reference

- Petrus et al. (2007) *Mol Pain* 3:40



4-(4-Chlorophenyl)-3-methylbut-3-en-2-oxime; AP 18

M.W. 209.67 C₁₁H₁₂ClNO
Store at RT
Soluble to 25 mg/ml in DMSO or to 25 mg/ml in ethanol

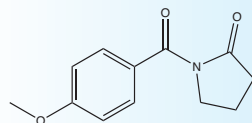
Aniracetam

Cat.No.	Size	Price €
BN0777	50 mg	65,00

Nootropic agent and positive allosteric modulator (PAM) at AMPA receptors. Displays antidepressant and anxiolytic effects *in vivo*.

Reference

1. Isaacson et al. (1991) *Proc Natl Acad Sci USA* 88:10936;
2. Lawrence et al. (2003) *Mol Pharmacol* 64:269;
3. Jin et al. (2005) *J Neurosci* 25:9027



1-(4-Anisoyl)pyrrolidin-2-one

M.W. 219.24 $C_{12}H_{13}NO_3$
[72432-10-1] Store at RT
Soluble to 100 mM in DMSO or to 25 mM in ethanol

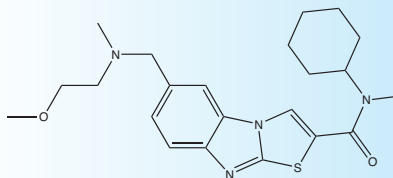
YM 202074

Cat.No.	Size	Price €
BN0779	10 mg	130,00

Potent, selective allosteric mGlu₁ antagonist ($K_i = 4.8$ nM). Neuroprotective agent *in vivo*.

Reference

1. Kohara et al. (2008) *Brain Res* 1191:168



N-Cyclohexyl-6-[[[(2-methoxyethyl)methylamino]methyl]-N-methyl-thiazolo[3,2-a]benzimidazole-2-carboxamide

M.W. 414.56 $C_{22}H_{30}N_4O_2S$
[299900-83-7] Desiccate at +4° C
Soluble to 100 mM in DMSO or to 25 mM in water (heating)

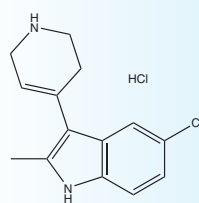
EMD 386088 hydrochloride

Cat.No.	Size	Price €
BN0780	10 mg	79,00

Potent 5-HT₆ agonist ($IC_{50} = 7.4$ nM) with moderate affinity at 5-HT₃ receptors ($IC_{50} = 34$ nM). It is selective over other 5-HT receptors (IC_{50} values are 110, 180, 240, 450, 620, 660 and 3000 nM for 5-HT_{1D}, 5-HT_{1B}, 5-HT_{2A}, 5-HT_{2C}, 5-HT₄, 5-HT_{1A} and 5-HT₇ receptors, respectively).

Reference

1. Mattsson et al. (2005) *Bioorg Med Chem Lett* 15:4230;
2. Meneses et al. (2008) *Behav Brain Res* 195:112;
3. Castaneda-Corral et al. (2009) *Neuroscience* 162:444



5-Chloro-2-methyl-3-(1,2,3,6-tetrahydro-4-pyridinyl)-1H-Indole hydrochloride

M.W. 283.20 $C_{14}H_{15}ClN_2 \cdot HCl$
[54635-62-0] Desiccate at RT
Soluble to 100 mM in DMSO or to 25 mM in water

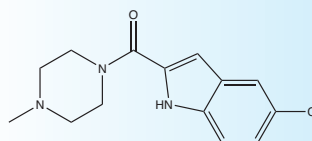
JNJ 777120

Cat.No.	Size	Price €
BN0781	10 mg	119,00

Potent and selective histamine H₄ receptor neutral antagonist.

Reference

1. Varga et al. (2005) *Eur J Pharmacol* 522:130



(5-Chloro-1H-indol-2-yl)(4-methylpiperazin-1-yl)methanone

M.W. 277.75 $C_{14}H_{16}ClN_3O$
[459168-41-3] Desiccate at RT
Soluble to 50 mM in DMSO

Amylin amid (human)

Cat.No.	Size	Price €
BP0393	500 µg	175,00

A 37-amino acid polypeptide that is structurally related to calcitonin, is secreted from the B cells of the pancreas. It functions as part of the endocrine pancreas and contributes to glycemic control. It may be responsible for the etiology of insulin resistance of type II diabetes mellitus through its modulation of peripheral effects of insulin. It blocks the activation of glycogen synthase by insulin and displays anorectic effects in rats.

Reference

1. Pittner et al. (1994) *J Cell Biochem* 55:19;
2. Hayden (2002) *JOP* 3:126

Glucagon (human)

Cat.No.	Size	Price €
BP0394	500 µg	250,00

Highly-conserved 29-amino acid polypeptide hormone produced by the pancreatic cells, that is released in response to low blood glucose.

Reference

1. White and Saunders (1986) *Nucleic Acids Res* 14:4719

P518 orphan GPCR SP9155 agonist (human)

Cat.No.	Size	Price €
BP0395	1 mg	275,00

A RF-amide peptide agonist for SP9155 ($EC_{50} = 7$ nM), an orphan G-protein-coupled receptor with high homology to orexin, neuropeptide FF and CCK receptors.

Reference

1. Jiang et al. (2003) *J Biol Chem* 278:27652;
2. Chartrei et al. (2003) *Proc Natl Acad Sci USA* 100:15247

ADMA dihydrochloride

Cat.No.	Size	Price €
BS0275	10 mg	45,00

Endogenous nitric oxide synthase (NOS) inhibitor.

Reference

1. Vallance et al. (1992) *Lancet* 339:572;
2. Mangoni (2009) *Adv Clin Chem* 48:73

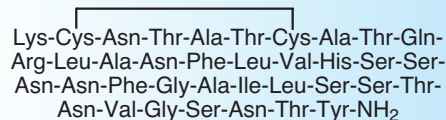
Ro 41-5253

Cat.No.	Size	Price €
BS0276	10 mg	85,00

Selective $RAR\alpha$ antagonist (IC_{50} (binding) values are 60 nM, 2400 nM and 3300 nM for $RAR\alpha$, $RAR\beta$ and $RAR\gamma$, respectively). It is also a $PPAR\gamma$ agonist (IC_{50} (binding) = 5 µM).

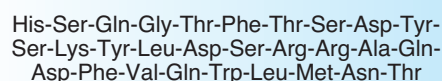
Reference

1. Keidel et al. (1994) *Mol Cell Biol* 14:287;
2. Bertram (2005) *Biochim Biophys Acta* 1740:170;
3. Schupp et al. (2007) *Mol Pharmacol* 71:1251;
4. Weiss et al. (2009) *Gastroenterology* 137:2136

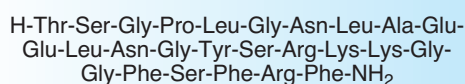


Islet Amyloid Polypeptide (IAPP); Diabetes-Associated Peptide (DAP)

M.W. 3903.28 $C_{165}H_{261}N_{55}O_{51}S_2$
[122384-88-7] **Desiccate at -20° C**
Soluble in water

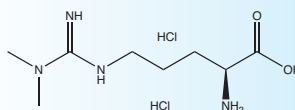


M.W. 3482.8 $C_{153}H_{225}N_{43}O_{49}S$
[16941-32-5] **Desiccate at -20° C**
Soluble to 1 mg/ml in water



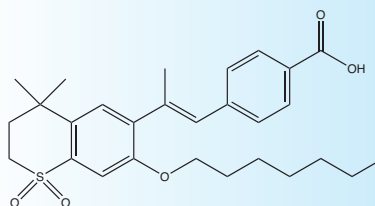
P518

M.W. 2832.13 $C_{127}H_{195}N_{37}O_{37}$
[600171-68-4] **Desiccate at -20° C**
Soluble to 1 mg/ml in water



N⁶,N⁶-Dimethylarginine dihydrochloride; Asymmetric Dimethylarginine dihydrochloride

M.W. 275.18 $C_8H_{18}N_4O_2 \cdot 2HCl$
[220805-22-1] **Desiccate at -20° C**
Soluble to 50 mg/ml in water



(E)-5,5-Dioxide-4-(2-(7-(heptyloxy)-3,4-dihydro-4,4-dimethyl-2H-1-benzothio-pyran-6-yl)-1-propenyl)benzoic acid; Ro-41-5253

M.W. 484.65 $C_{28}H_{36}O_5S$
Store at RT
Soluble to 100 mM in DMSO or to 100 mM in ethanol

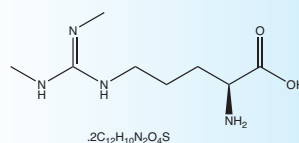
SDMA

Cat.No.	Size	Price €
BS0277	5 mg	75,00

Endogenous counterpart of ADMA (Cat. No. BS0275). ADMA and possibly SDMA contribute to hypertension and atherosclerosis in patients with chronic renal disease: ADMA inhibits directly eNOS, whereas SDMA competes with the NO precursor arginine for uptake into the cells.

Reference

1. Fleck et al. (2003) *Clin Chim Acta* 336:1;
2. Busch et al. (2006) *Amino Acids* 30:225;
3. Schulte et al. (2010) *Eur J Endocrinol* 162:525



***N*⁶,*N*^{6'}-Dimethyl-L-arginine di(*p*-hydroxyazobenzene-*p*'-sulfonate) salt; Symetric Dimethylarginine di(*p*-hydroxyazobenzene-*p*'-sulfonate) salt**

M.W. 758.82 $C_8H_{18}N_4O_2 \cdot 2C_{12}H_{10}N_2O_4S$
[102783-24-4] Desiccate at $-20^\circ C$
Soluble in DMSO or methanol

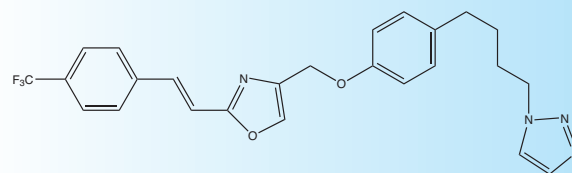
TAK-165

Cat.No.	Size	Price €
BS0278	10 mg	160,00

Potent, irreversible inhibitor of human epithelial growth factor receptor 2 (HER-2, ERBB2) ($IC_{50} = 6$ nM) that displays > 4000-fold selectivity over EGFR, FGFR, PDGFR, JAK1 and Src.

Reference

1. Sridhar et al. (2003) *Lancet Oncol* 4:397;
2. Nagasawa et al. (2006) *Int J Urol* 13:587;
3. Spector et al. (2007) *Breast Cancer Res* 9:205



1-[4-[4-[[2-[(1E)-2-[4-(Trifluoromethyl)phenyl]ethenyl]-4-oxazolyl]methoxy]phenyl]butyl]-1H-1,2,3-triazole; Mubritinib

M.W. 468.47 $C_{25}H_{23}F_3N_4O_2$
[366017-09-6] Desiccate at $-20^\circ C$
Soluble to 100 mM in DMSO or to 5 mM in ethanol

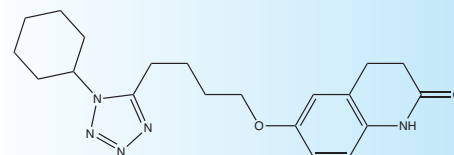
Gilostazol

Cat.No.	Size	Price €
BS0279	10 mg	139,00

Potent phosphodiesterase 3A (PDE3A) inhibitor ($IC_{50} = 200$ nM) and inhibitor of adenosine uptake. Antithrombotic agent. It inhibits neuronal cell death by activating maxi-K channels. It improves cognitive function in mice by increasing the production of insulin-like growth factor-I in the hippocampus.

Reference

1. Schror (2002) *Diabetes Obes Metab* 4:514;
2. Kambayashi et al. (2003) *Curr Pharm Des* 9:2289;
3. Lee et al. (2003) *J Pharmacol Exp Ther* 308:1182;
4. Zhao et al. (2010) *Neuropharmacology* 58:774



6-[4-(1-Cyclohexyl-1H-tetrazol-5-yl)butoxy]-3,4-dihydro-2(1H)-quinolinone

M.W. 369.46 $C_{20}H_{27}N_5O_2$
[73963-72-1] Store at RT
Soluble to 50 mM in DMSO or to 10 mM in ethanol

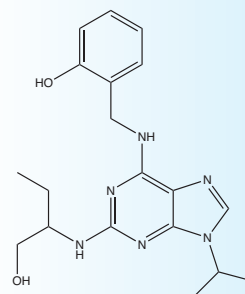
Olomoucine II

Cat.No.	Size	Price €
BS0280	1 mg	79,00

Cyclin-dependent kinase cdk1 inhibitor with antitumour and antiproliferative potencies. See also Olomoucine (Cat. No. BS0140). Recently it was shown, that it exhibits also antiviral properties.

Reference

1. Krystof et al. (2005) *Cell Mol Life Sci* 62:1763;
2. Holcakova et al. (2010) *Antivir Chem Chemother* 20:133



2-(1-Ethyl-2-hydroxyethylamino)-6-(2-hydroxybenzyl)amino-9-isopropylpurine

M.W. 370.45 $C_{19}H_{26}N_6O_2$
[500735-47-7] Desiccate at $-20^\circ C$
Soluble to 100 mM in DMSO or in ethanol