

# Neurochemicals

## Newsletter

# Newsletter 1/2010

### New Products for Neurosciences Research

#### Page 2

- BG0524 **Clofarabine** - Antitumour agent
- BG0525 **Voglibose** -  $\alpha$ -Glucosidase inhibitor
- BG0526 **Orlistat** - A nonabsorbed lipase inhibitor
- BG0527 **(S)-(+)-Ibuprofen** - Cyclooxygenase inhibitor (COX-1 > COX-2)

#### Page 3

- BG0528 **Perindopril** - Angiotensin ACE inhibitor, antihypertensive agent
- BG0529 **Spirapril hydrochloride** - Angiotensin ACE inhibitor, antihypertensive agent
- BG0531 **Toremifene citrate** - Selective estrogen receptor modulator (SERM)
- BG0532 **Nomifensine maleate** - Selective dopamine uptake inhibitor, antidepressant agent

#### Page 4

- BG0533 **Voriconazole** - A triazole antifungal agent
- BG0535 **Ezetimibe** - Hypolipidemic agent
- BG0536 **Indiplon** - Potent GABA<sub>A</sub> positive allosteric modulator
- BG0537 **Nateglinide** - ATP-dependent K<sup>+</sup> channel K<sub>ATP</sub> inhibitor

#### Page 5

- BG0539 **DFMO** - Ornithine decarboxylase (ODC) inhibitor
- BN0760 **Cannabigerol** - A non-psychoactive cannabinoid
- BN0761 **Devazepide** - Potent, selective CCK1 antagonist
- BN0763 **UBP 304** - Potent, selective Glu<sub>K5</sub> kainate antagonist

#### Page 6

- BN0765 **URB 597** - Potent, selective FAAH inhibitor
- BN0766 **Liquiritigenin** - Anti-inflammatory flavanoid
- BN0767 **(S)-ESBA hydrochloride** - Potent kynurenine aminotransferase II inhibitor
- BN0768 **Brefeldin A** - Fungal antibiotic

#### Page 7

- BP0383 **Buserelin** - Gonadotropin-releasing hormone (GnRH) agonist
- BP0384 **Goserelin** - Gonadotropin-releasing hormone (GnRH) agonist
- BP0385 **Eledoisin** - Nonmammal tachykinin
- BP0386 **Intermedin/Adrenomedullin-2 (human)** - Family of calcitonin/CGRP peptide hormones

#### Page 8

- BP0387 **GLYX 13** - NMDA receptor partial agonist (glycine site)
- BS0267 **Go 6976** - Very potent PKC inhibitor
- BS0268 **Lupeol** - Triperpene and antitumour agent
- BS0269 **GW 501516** - Highly selective PPAR $\delta$  agonist

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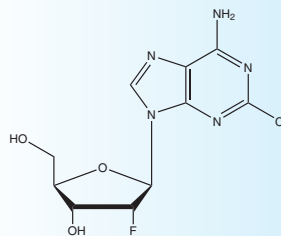
## Clofarabine

Cat.No.	Size	Price €
BG0524	50 mg	360,00

A purine nucleoside antimetabolite and antitumour agent. It is used in paediatrics to treat a type of leukaemia called relapsed or refractory acute lymphoblastic leukaemia.

### Reference

1. Lech-Maranda et al. (2009) *Mini Rev Med Chem* 9:805;
2. Larson and Venugopal (2009) *Expert Opin Pharmacother* 10:1353;
3. Robak et al. (2009) *Molecules* 14:1183



5-(6-Amino-2-chloro-purin-9-yl)-4-fluoro-2-(hydroxymethyl)oxolan-3-ol; Clolar; Evoltra

M.W. 303.68  $C_{10}H_{11}ClFN_5O_3$   
[123318-82-1] Store at RT  
Soluble to 100 mM in DMSO or ethanol

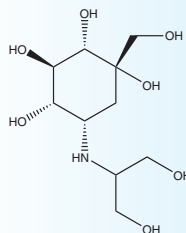
## Voglibose

Cat.No.	Size	Price €
BG0525	25 mg	150,00

An  $\alpha$ -glucosidase inhibitor used for lowering post-prandial blood glucose levels in the therapy of diabetes mellitus. See also Miglitol (Cat. No. BG0507).

### Reference

1. Kawamori et al. (2009) *Lancet* 373:1607;
2. Scheen (2009) *Lancet* 373:1579



(1S,2S,3R,4S,5S)-5-(1,3-Dihydroxypropan-2-ylamino)-1-(hydroxymethyl)cyclohexane-1,2,3,4-tetraol; Basen; Voglib

M.W. 267.28  $C_{10}H_{21}NO_7$   
[83480-29-9] Store at +4 ° C  
Soluble to 100 mM in DMSO

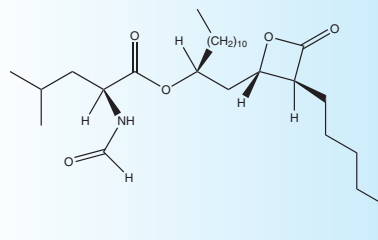
## Orlistat

Cat.No.	Size	Price €
BG0526	50 mg	130,00

A nonabsorbed inhibitor of gastric and pancreatic lipases, that potently inhibits lipoprotein lipase, monoacylglycerol lipase and diacylglycerol lipase. It decrease systemic absorption of dietary fat. It is a saturated derivative of lipstatin, a potent natural inhibitor of pancreatic lipases isolated from the bacterium *Streptomyces toxytricini*.

### Reference

1. Barbier and Schneider (1987) *Helvetica Chimica Acta* 70:196;
2. Heck et al. (2000) *Pharmacotherapy* 20:270



[(1S)-1-[(2S,3S)-3-Hexyl-4-oxo-oxetan-2-yl]methyl]dodecyl] (2S)-2-formamido-4-methyl-pentanoate; Xenical; Tetrahydrolipstatin

M.W. 495.73  $C_{29}H_{53}NO_5$   
[96829-58-2] Store at -20 ° C  
Soluble to 25 mM in DMSO

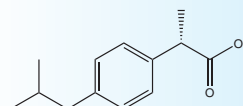
## (S)-(+)-Ibuprofen

Cat.No.	Size	Price €
BG0527	250 mg	55,00

Active isomer of Ibuprofen (Cat. No. BG0218). Cyclooxygenase (COX) inhibitor with greater activity against COX-1 compared to COX-2.

### Reference

1. Kato et al. (2001) *J Pharm Pharmacol* 53:1679;
2. Rainsford (2003) *Int J Clin Pract Suppl* 135:3



(S)- $\alpha$ -Methyl-4-(2-methylpropyl)benzeneacetic acid

M.W. 206.28  $C_{13}H_{18}O_2$   
[51146-56-6] Store at RT  
Soluble to 100 mM in ethanol or to 100 mM in DMSO

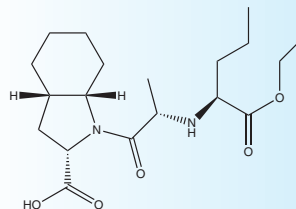
## Perindopril

Cat.No.	Size	Price €
BG0528	100 mg	160,00

A long-acting angiotensin-converting enzyme (ACE) inhibitor. As a prodrug, perindopril is metabolised *in vivo* to the active form perindoprilat by various esterases.

### Reference

1. Morgan and Anderson (1992) *Clin Exp Pharmacol Physiol* 19:61



(2*S*,3*aS*,7*aS*)-1-[[*(2S)*-2-[[*(2S)*-1-Carboxybutyl]amino]propanoyl]-2,3,3*a*,4,5,6,7,7*a*-octahydroindole-2-carboxylic acid; Coversum; Coversyl; Aceaon

M.W. 368.47 C<sub>19</sub>H<sub>32</sub>N<sub>2</sub>O<sub>5</sub>  
[82834-16-0] Store at RT  
Soluble to 100 mM in DMSO or in ethanol

## Spirapril hydrochloride

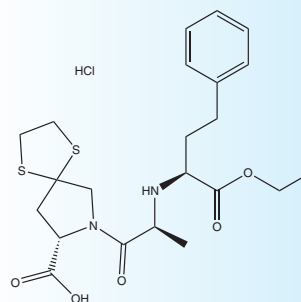
Cat.No.	Size	Price €
BG0529	50 mg	290,00

A long-acting angiotensin-converting enzyme (ACE) inhibitor. As a prodrug, spirapril is metabolised *in vivo* to the active form spiraprilat by various esterases.

### Reference

1. Noble and Sorkin (1995) *Drugs* 49:750;

2. Jardine and Elliott (1999) *J Cardiovasc Pharmacol* 34 Suppl 1:S31



(8*S*)-7-[[*(2S)*-2-[[*(2S)*-1-Ethoxy-1-oxo-4-phenylbutan-2-yl]amino]propanoyl]-1,4-dithia-7-azaspiro[4.4]nonane-8-carboxylic acid hydrochloride; Renormax

M.W. 503.07 C<sub>22</sub>H<sub>30</sub>N<sub>2</sub>O<sub>5</sub>S<sub>2</sub>.HCl  
[94841-17-5] Store at RT  
Soluble to 100 mM in ethanol or to 100 mM in DMSO

## Toremifene citrate

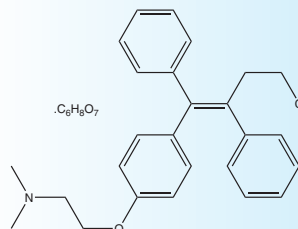
Cat.No.	Size	Price €
BG0531	100 mg	296,00

An oral selective estrogen receptor modulator (SERM), that is used in advanced (metastatic) breast cancer and being evaluated for prevention of prostate cancer. See also Raloxifene (Cat. No. BS0157) and Tamoxifen (Cat. No. BG0328).

### Reference

1. Taras et al. (2000) *Clin Pharmacokinet* 39:327;

2. Taneja et al. (2006) *Expert Opin Investig Drugs* 15:293



(*Z*)-2-(4-(4-Chloro-1,2-diphenyl-1-butenyl)phenoxy)-*N,N*-dimethylethanamine citrate; Acapodene; Fareston; GTx 006; *Z*-Toremifene

M.W. 598.08 C<sub>26</sub>H<sub>28</sub>ClNO.C<sub>6</sub>H<sub>8</sub>O<sub>7</sub>  
[89778-27-8] Desiccate at +4° C  
Soluble to 100 mM in ethanol or to 100 mM in DMSO

## Nomifensine maleate

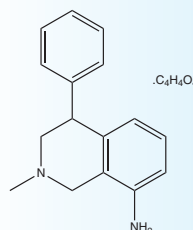
Cat.No.	Size	Price €
BG0532	100 mg	150,00

A selective dopamine uptake inhibitor (K<sub>i</sub> value are 0.09 μM and 0.21 μM in rat caudate-putamen and nucleus accumbens, respectively). Antidepressant agent, that acts at a different binding site from that of cocaine.

### Reference

1. Kinney (1985) *Clin Pharm* 4:625;

2. Jones et al. (1995) *J Pharmacol Exp Ther* 274:396



1,2,3,4-Tetrahydro-2-methyl-4-phenyl-8-isoquinolinamine maleate; Merital

M.W. 354.40 C<sub>16</sub>H<sub>18</sub>N<sub>2</sub>.C<sub>4</sub>H<sub>4</sub>O<sub>4</sub>  
[32795-47-4] Store at RT  
Soluble to 100 mM in ethanol or to 100 mM in DMSO

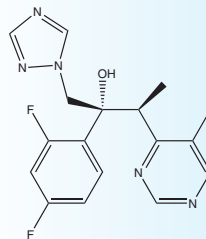
## Voriconazole

Cat.No.	Size	Price €
BG0533	50 mg	150,00

A triazole antifungal agent that is generally used to treat serious, invasive fungal infections. It is the new standard treatment of invasive aspergillosis. See also Fluconazole (Cat. No. BG0194), Isoconazole (Cat. No. BG0222), Ketoconazole (Cat. No. BG0227) and Itraconazole (Cat. No. BG0414).

### Reference

- Herbrecht et al. (2002) *N Engl J Med* 347:408;
- Smith et al. (2006) *Antimicrob Agents Chemother* 50:1570;
- Parize et al. (2009) *Antimicrob Agents Chemother* 53:1048



(2R,3S)-2-(2,4-Difluorophenyl)-3-[(5-fluoropyrimidin-4-yl)-1-(1H-1,2,4-triazol-1-yl)butan-2-ol]; Vfend

M.W. 349.31 C<sub>16</sub>H<sub>14</sub>F<sub>3</sub>N<sub>5</sub>O

[137234-62-9] Store at RT

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

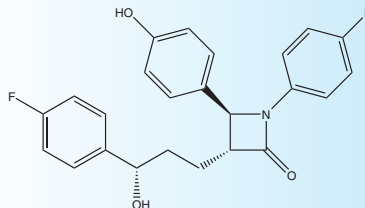
## Ezetimibe

Cat.No.	Size	Price €
BG0535	25 mg	110,00

A hypolipidemic agent used to lower cholesterol levels. It acts by decreasing cholesterol absorption in the intestine. The Niemann-Pick C1-Like 1 (NPC1L1) was identified as a critical mediator of cholesterol absorption and an essential component of the ezetimibe-sensitive pathway.

### Reference

- Garcia-Calvo et al. (2005) *Proc Natl Acad Sci USA* 102:8132;
- Chang and Chang (2008) *Cell Metab* 7:469



(3R,4S)-1-(4-Fluorophenyl)-3-[(3S)-3-(4-fluorophenyl)-3-hydroxypropyl]-4-(4-hydroxyphenyl)azetidin-2-one; Ezetrol; Zetia

M.W. 409.43 C<sub>24</sub>H<sub>21</sub>F<sub>2</sub>NO<sub>3</sub>

[163222-33-1] Store at RT

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

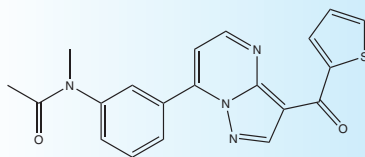
## Indiplon

Cat.No.	Size	Price €
BG0536	10 mg	133,00

Potent positive allosteric modulator (PAM) at GABA<sub>A</sub> receptors acting at the benzodiazepine site (K<sub>i</sub> values are 1.2 and 1.7 nM in rat frontal cortex and cerebellum respectively). Displays ~ 10-fold selectivity for α1 subunit-containing GABA<sub>A</sub> receptors. A novel pyrazolopyrimidine sedative-hypnotic agent displaying *in vivo* activity.

### Reference

- Sullivan et al. (2004) *J Pharmacol Exp Ther* 311:537;
- Foster et al. (2004) *J Pharmacol Exp Ther* 311:547;
- Petroski et al. (2006) *J Pharmacol Exp Ther* 317:369;
- Marrs (2008) *Ann Pharmacother* 42:1070



N-Methyl-N-[3-[3-[2-thienylcarbonyl]pyrazolo[1,5-a]pyrimidin-7-yl]phenyl]acetamide; NBI 34060

M.W. 376.43 C<sub>20</sub>H<sub>16</sub>N<sub>4</sub>O<sub>2</sub>S

[325715-02-4] Store at +4 ° C

Soluble to 50 mM in DMSO or to 5 mM in ethanol

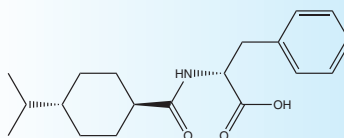
## Nateglinide

Cat.No.	Size	Price €
BG0537	50 mg	390,00

Antidiabetic agent used to treat type II diabetes. It acts by stimulating release of insulin from the β-cells of the islets of pancreas inhibiting ATP-sensitive K<sup>+</sup> channels, thereby activating the Ca<sup>2+</sup> channels with increase in intracellular calcium to release insulin.

### Reference

- Dunn and Faulds (2000) *Drugs* 60:607;
- Hanif and Kumar (2001) *Expert Opin Pharmacother* 2:1027;
- Tentolouris et al. (2007) *Vasc Health Risk Manag* 3:797



N-[(trans-4-Isopropylcyclohexyl)carbonyl]-D-phenylalanine; Starlix, Fastic; Starsis

M.W. 317.42 C<sub>19</sub>H<sub>27</sub>NO<sub>3</sub>

[105816-04-4] Store at RT

Soluble to 100 mM in DMSO or ethanol

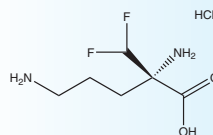
## DFMO

Cat.No.	Size	Price €
BG0539	50 mg	206,00

Inhibits polyamine biosynthesis by the selective, irreversible inhibition of ornithine decarboxylase (ODC). An antitumour and chemoprotective agent that blocks angiogenesis. It is also highly effective in African trypanosomiasis (sleeping sickness), especially the in West African form (*Trypanosoma brucei gambiense*).

### Reference

1. Pepin et al. (1987) *Lancet* 2:1431;
2. Meyskens and Gerner (1999) *Clin Cancer Res* 5:945



**DL-2-(Difluoromethyl)-ornithine hydrochloride; Eflornithine; Ornidyl**

**M.W. 218.63**  $C_6H_{12}F_2N_2O_2 \cdot HCl$

**[70052-12-9] Desiccate at RT**

**Soluble to 75 mM in water or to 100 mM in ethanol**

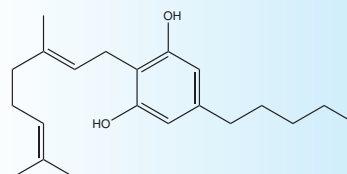
## Cannabigerol

Cat.No.	Size	Price €
BN0760	1 mg	255,00

A non-psychoactive cannabinoid found as one of about 70 constituents in *Cannabis sativa*. After chronic administration it leads to a considerable fall in ocular tension, suggesting that it has therapeutic potential for the treatment of glaucoma.

### Reference

1. Colasanti (1990) *J Ocul Pharmacol* 6:259;
2. Williamson and Evans (2000) *Drugs* 60:1303;
3. ElSohly and Slade (2005) *Life Sci* 78:539



**(Z)-2-(3,7-Dimethylocta-2,6-dienyl)-5-pentylbenzene-1,3-diol; CBG**

**M.W. 316.48**  $C_{21}H_{32}O_2$

**Store at +4° C**

**Soluble in ethanol, methanol or DMSO**

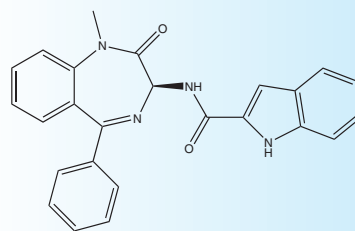
## Devazepide

Cat.No.	Size	Price €
BN0761	10 mg	188,00

A selective and potent cholecystokinin CCK1 antagonist. It increases appetite and accelerates gastric emptying and has been suggested as a potential treatment for a variety of gastrointestinal problems including dyspepsia, gastroparesis and gastric reflux. Recently, it has been shown that it induces cell death of Ewing tumour cells.

### Reference

1. D'Amato M et al. (1991) *Br J Pharmacol* 102:391;
2. Hernando et al. (1996) *Br J Pharmacol* 118:400;
3. Ebenezer (2002) *Eur J Pharmacol* 441:79;
4. Carrillo et al. (2009) *Anticancer Drugs* 20:527



**3S-(-)-N-(2,3-Dihydro-1-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazepin-3-yl)-1H-indole-2-carboxamide; MK 329; L-364,718**

**M.W. 408.46**  $C_{25}H_{20}N_4O_2$

**[103420-77-5] Store at +4° C**

**Soluble to 100 mM in DMSO or to 50 mM in ethanol**

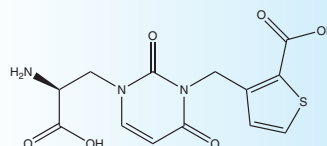
## UBP 304

Cat.No.	Size	Price €
BN0763	10 mg	144,00

N3-substituted willardiine derivative acting as a potent and selective  $GLU_{K5}$  (GluR5)-subunit containing kainate receptor antagonist ( $K_D = 105$  nM).

### Reference

1. Dolman et al. (2006) *J Med Chem* 49:2579



**(S)-1-(2-Amino-2-carboxyethyl)-3-(2-carboxythiophen-3-ylmethyl)pyrimidine-2,4-dione**

**M.W. 339.32**  $C_{13}H_{13}N_3O_6S$

**Desiccate at RT**

**Soluble to 100 mM in water with 1 eq. NaOH**

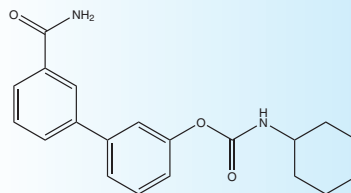
## URB 597

Cat.No.	Size	Price €
BN0765	10 mg	82,00

Potent and selective inhibitor of fatty acid amide hydrolase (FAAH) displaying an  $IC_{50}$  of 4.6 nM in brain membranes and 0.5 nM in intact neurons. It exhibits both anti-nociceptive and anxiolytic effects *in vivo* without evoking other symptoms associated with cannabinoid-like compounds.

### Reference

1. Cravatt et al. (1996) *Nature* 384:83;
2. Cravatt et al. (2001) *Proc Natl Acad Sci USA* 98:9371;
3. Kathuria et al. (2003) *Nature Med* 1:76;
4. Manwell et al. (2009) *Pharmacol Biochem Behav* 94:154



(3'-(Aminocarbonyl)[1,1'-biphenyl]-3-yl)-cyclohexylcarbamate

M.W. 338.40  $C_{20}H_{22}N_2O_3$

[546141-08-6] Store at  $-20^{\circ}C$

Soluble to 10 mg/ml in DMSO or to 1 mg/ml in ethanol

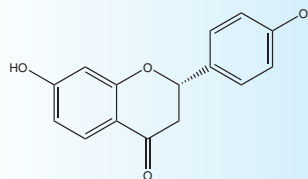
## Liquiritigenin

Cat.No.	Size	Price €
BN0766	10 mg	250,00

Flavonoid and active component in extracts of *Glycyrrhizae radix*. It exerts anti-inflammatory effects, which results from the inhibition of NF- $\kappa$ B activation in macrophages, thereby decreasing production of iNOS and proinflammatory cytokines. Recently it has been shown that Liquiritigenin inhibits Amyloid- $\beta$  (25-35)-induced neurotoxicity and secretion of Amyloid- $\beta$  (1-40) in rat hippocampal neurons.

### Reference

1. Kim et al. (2008) *Br J Pharmacol* 154:165;
2. Liu et al. (2009) *Acta Pharmacol Sin* 30:899



(S)-7-Hydroxy-2-(4-hydroxyphenyl)chroman-4-one; 4',7-Dihydroxyflavanone

M.W. 256.25  $C_{15}H_{12}O_4$

[578-86-9] Store at  $+4^{\circ}C$

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

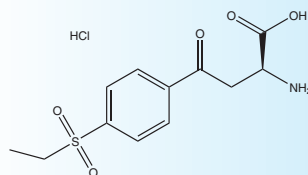
## (S)-ESBA hydrochloride

Cat.No.	Size	Price €
BN0767	1 mg	56,00

Potent and selective inhibitor of mouse/rat kynurenine aminotransferase II (KAT II). Kynurenic acid (KYNA) is an endogenous antagonist at  $\alpha 7$  nicotinic acetylcholine (ACh) receptors.

### Reference

1. Pellicciari et al. (2006) *ChemMedChem* 1:528;
2. Pellicciari et al. (2008) *ChemMedChem* 3:1199;
3. Amori et al. (2009) *Neuroscience* 159:196



(S)-(-4-Ethylsulfonyl)benzoylalanine hydrochloride

M.W. 321.78  $C_{12}H_{15}NO_5 \cdot HCl$

Store at  $-20^{\circ}C$

Soluble to 100 mM in DMSO or ethanol

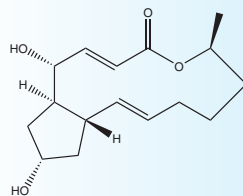
## Brefeldin A

Cat.No.	Size	Price €
BN0768	5 mg	98,00

A fungal antibiotic produced by *Eupenicillium brefeldianum*. Brefeldin A interferes with retrograde protein transport from the Golgi apparatus to the endoplasmic reticulum (ER). It blocks binding of ADP-ribosylation factor to the Golgi apparatus and inhibits GDP-GTP exchange.

### Reference

1. Ktistakis et al. (1992) *Nature* 356:344;
2. Tsai et al. (1994) *Proc Natl Acad Sci USA* 91:3063;
3. Zeghouf et al. (2005) *Biochem Soc Trans* 33:1265;
4. Kregler et al. (2009) *FEBS Lett* 583:1207



1,6,7,8,9,11 $\alpha$ ,12,13,14,14 $\alpha$   $\alpha$ -Decahydro-1 $\beta$ ,13 $\alpha$ -dihydroxy-6 $\beta$ -methyl-4H-cyclopent(f)oxacyclotridecin-4-one; BFA

M.W. 280.36  $C_{16}H_{24}O_4$

[20350-15-6] Desiccate at  $-20^{\circ}C$

Soluble to 10 mM in ethanol or to 50 mM in DMSO

## Buserelin

Cat.No.	Size	Price €
BP0383	1 mg	75,00

Gonadotropin-releasing hormone (GnRH) agonist. By causing constant stimulation of the pituitary, it decreases pituitary secretion of gonadotropins luteinizing hormone (LH) and follicle stimulating hormone (FSH). It is used for some types of fertility treatment, treatment of endometriosis and of advanced prostate cancer. See also goserelin (Cat. No. BP0384).

### Reference

1. Van Leusden (1994) *Gynecol Endocrinol* 8:215;
2. Finch et al. (2009) *Am J Physiol Cell Physiol* 297:C591

## Goserelin

Cat.No.	Size	Price €
BP0384	1 mg	50,00

Gonadotropin-releasing hormone (GnRH) agonist. By causing constant stimulation of the pituitary, it decreases pituitary secretion of gonadotropins luteinizing hormone (LH) and follicle stimulating hormone (FSH). It is used for some types of fertility treatment, treatment of endometriosis and of advanced prostate cancer. See also buserelin (Cat. No. BP0383).

### Reference

1. Van Leusden (1994) *Gynecol Endocrinol* 8:215;
2. Sharma et al. (2008) *Cochrane Database Syst Rev* Oct 8 (4):CD004562

## Eledoisin

Cat.No.	Size	Price €
BP0385	1 mg	90,00

An undecapeptide of mollusk origin, belonging to the tachykinin family of neuropeptides. Mammalian tachykinins substance P, NKA, and NKB have similar effects as tachykinins of nonmammals, these peptides exhibit a wide and complex spectrum of pharmacological and physiological activities such as vasodilation, hypertension, and stimulation of extravascular smooth muscle.

### Reference

1. Bertaccini (1976) *Pharmacol Rev* 28:127;
2. Severini et al. (2002) *Pharmacol Rev* 54:285

## Intermedin/Adrenomedullin-2 (human)

Cat.No.	Size	Price €
BP0386	100 µg	280,00

Intermedin/Adrenomedullin-2 (ADM2) belongs to the family of calcitonin/calcitonin gene-related peptide (CGRP) peptide hormones important for regulating diverse physiologic functions and the chemical composition of fluids and tissues. Recently it was shown that it enhances angiogenesis through ERK, Akt/NOS/NO, and VEGF/VEGFR-2 signaling pathways and raises the potential of peptide administration in the modulation of endothelial dysfunction.

### Reference

1. Roh et al. (2004) *J Biol Chem* 279:7264;
2. Yang et al. (2005) *Peptides* 26:501;
3. Smith et al. (2009) *Am J Physiol Heart Circ Physiol* 297:H1040

pGlu-His-Trp-Ser-Tyr-D-Ser(t-Bu)-Leu-Arg-Pro-NHEt

*Des-Gly<sup>10</sup>-[D-Ser(t-Bu)<sup>6</sup>]-LH-RH ethylamide; Suprefact; Suprecur*

*M.W. 1239.42 C<sub>60</sub>H<sub>86</sub>N<sub>16</sub>O<sub>13</sub>  
[68630-75-1] Desiccate at -20° C  
Soluble to 1 mg/ml in water*

pGlu-His-Trp-Ser-Tyr-D-Ser(t-Bu)-Leu-Arg-Pro-Azagly-NH<sub>2</sub>

*[D-Ser(t-Bu)<sup>6</sup>,Azagly<sup>10</sup>]-LHRH; Zoladex*

*M.W. 1269.41 C<sub>59</sub>H<sub>84</sub>N<sub>18</sub>O<sub>14</sub>  
[145781-92-6] Desiccate at -20° C  
Soluble to 1 mg/ml in water*

Glp-Pro-Ser-Lys-Asp-Ala-Phe-Ile-Gly-Leu-Met-NH<sub>2</sub>

*M.W. 1188.4 C<sub>54</sub>H<sub>85</sub>N<sub>13</sub>O<sub>15</sub>S  
Desiccate at -20° C  
Soluble to 1 mg/ml in water*

H-Thr-Gln-Ala-Gln-Leu-Leu-Arg-Val-Gly-Cys-  
Val-Leu-Gly-Thr-Cys-Gln-Val-Gln-Asn-Leu-  
Ser-His-Arg-Leu-Trp-Gln-Leu-Met-Gly-Pro-  
Ala-Gly-Arg-Gln-Asp-Ser-Ala-Pro-Val-Asp-  
Pro-Ser-Ser-Pro-His-Ser-Tyr-NH<sub>2</sub>

*M.W. 5100.8 C<sub>219</sub>H<sub>349</sub>N<sub>69</sub>O<sub>66</sub>S<sub>3</sub>  
Desiccate at -20° C  
Soluble in water*

## GLYX 13

Cat.No.	Size	Price €
BP0387	1 mg	90,00

NMDA receptor partial agonist (glycine site) displaying nootropic, neuroprotective and antinociceptive activity. A brain penetrant agent that enhances learning, memory and cognition *in vivo*.

### Reference

1. Moskál et al. (2005) *Neuropharmacology* 49:1077;
2. Wood et al. (2008) *Neuroreport* 19:1059;
3. Stanton et al. (2009) *Neuroreport* 20:1193

H-Thr-Pro-Pro-Thr-NH<sub>2</sub>

M.W. 413.47 C<sub>18</sub>H<sub>31</sub>N<sub>5</sub>O<sub>6</sub>

[117928-94-6] Desiccate at -20° C

Soluble to 1 mg/ml in water

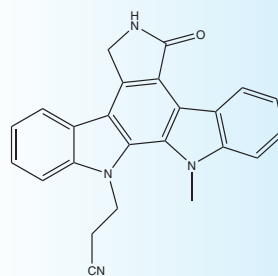
## Go 6976

Cat.No.	Size	Price €
BS0267	1 mg	150,00

Very potent protein kinase C inhibitor showing high selectivity for the A-group of PKC isotypes (α, β, and γ) (IC<sub>50</sub> values 2-10 nM). It shows little or no inhibition of the B- and C-groups of PKC isotypes, even at much higher concentrations. Also a potent inhibitor of JAK2 and FLT3 tyrosine kinases with significant activity in primary acute myeloid leukaemia cells.

### Reference

1. Martiny-Baron et al. (1993) *J Biol Chem* 268:9194;
2. Kleinschroth et al. (1993) *Bioorg Med Chem Lett* 3:1959;
3. Behrens et al. (1999) *J Neurochem* 72:919;
4. Grandage et al. (2006) *Br J Haematol* 135:303



5,6,7,13-Tetrahydro-13-methyl-5-oxo-12H-indolo[2,3-a]pyrrolo[3,4-c]carbazole-12-propanenitrile; PD 406976

M.W. 378.43 C<sub>24</sub>H<sub>18</sub>N<sub>4</sub>O

[136194-77-9] Desiccate at -20° C

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

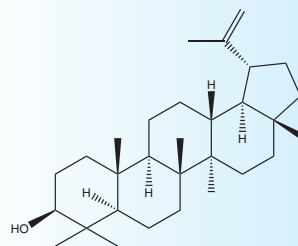
## Lupeol

Cat.No.	Size	Price €
BS0268	10 mg	65,00

A triterpene, found in fruits and vegetables, that inhibits the growth of tumours originated from human androgen-sensitive prostate cancer (CaP) cells and decreases the serum-PSA levels in a mouse model. It induces apoptosis in human epidermoid carcinoma A431 cells through regulation of mitochondrial, Akt/PKB and NFκB signaling pathways.

### Reference

1. Saleem et al. (2009) *Biochem Biophys Res Commun* 388:576;
2. Prasad et al. (2009) *Cancer Biol Ther* 8:1632



3β-Hydroxy-20(29)-lupene; 20(29)-Lupen-3β-ol; Fagarasterol

M.W. 426.72 C<sub>30</sub>H<sub>50</sub>O

[545-47-1] Desiccate at +4° C

Soluble to 10 mM in ethanol or to 50 mM in DMSO

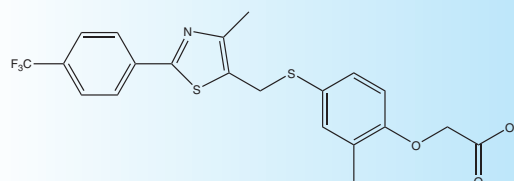
## GW 501516

Cat.No.	Size	Price €
BS0269	1 mg	115,00

Highly selective peroxisome proliferator-activated receptor (PPAR) δ agonist (EC<sub>50</sub> = 1.1nM) with a 1000-fold selectivity over the other human subtypes. It activates AMP-activated protein kinase and stimulates glucose uptake in skeletal muscle tissue.

### Reference

1. Sznajdman et al. (2003) *Bioorg Med Chem Lett* 13:1517;
2. Wang et al. (2003) *Cell* 113:159;
3. Wei and Kozikowski (2003) *J Org Chem* 68:9116;
4. Krämer et al. (2007) *J Biol Chem* 282:19313



2-[2-Methyl-4-([4-methyl-2-[4-(trifluoromethyl)phenyl]-1,3-thiazol-5-yl]methylsulfanyl]phenoxy]acetic acid; GW1516; GSK-516

M.W. 453.50 C<sub>21</sub>H<sub>18</sub>F<sub>3</sub>N<sub>3</sub>S<sub>2</sub>

[317318-70-0] Store at +4° C (protect from light)

Soluble to 100 mM in DMSO or to 50 mM in ethanol