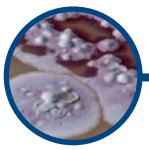
AdipoGen®
LIFE SCIENCES

www.adipogen.com

Small Molecules
HIGHLIGHTS

Synthetic Small Molecules

Unique Natural Products



Rare Antibiotics

MANUFACTURED IN SWITZERLAND

Full Panel of >1500 Small Molecules
Over 25 Years of Experience
High-end Customer & Technical Support
BULK Quantities

Collaborating with:

BioViotica
Rare Active Natural Products

chemodex

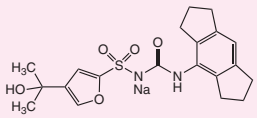
innaxon

Selected NLRP3 Inflammasome Inhibitors

NEW

MCC950 . Na
AG-CR1-3615 — 1 mg | 5 mg | 10 mg

Formula: $C_{20}H_{23}N_2NaO_5S$
MW: 426.5
CAS: 256373-96-3



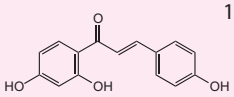
Potent and selective NLRP3 inflammasome inhibitor.

LIT: A small-molecule inhibitor of the NLRP3 inflammasome for the treatment of inflammatory diseases: R.C. Coll, et al.; Nat. Med. **21,** 248 (2015)

NEW

Isoliquiritigenin
AG-CN2-0459 — 10 mg | 50 mg

Formula: $C_{15}H_{12}O_4$
MW: 256.3
CAS: 961-29-5
Source: *Synthetic*



NEW INSIGHTS: Inhibits NLRP3-activated ASC oligomerization. Blocks priming and activation step.

LIT: Isoliquiritigenin is a potent inhibitor of NLRP3 inflammasome activation and diet-induced adipose tissue inflammation: H. Honda, et al.; J. Leukoc. Biol. **96,** 1087 (2014)

Arglabin
AG-CN2-0458 — 1 mg | 5 mg

BAY 11-7082
AG-CR1-0013 — 10 mg | 50 mg

Colchicine
AG-CN2-0048 — 500 mg | 1 g

Glyburide (USP)
AG-CR1-3613 — 1 g | 5 g | 10 g

(R)-3-Hydroxybutyric acid
AG-CR1-3616 — 25 mg | 100 mg

(S)-3-Hydroxybutyric acid
AG-CR1-3617 — 25 mg | 100 mg

LATEST INSIGHT: The ketone metabolite β-hydroxybutyrate blocks NLRP3 inflammasome-mediated inflammatory disease: Y.H. Youm, et al.; Nat. Med. **21,** 263 (2015)

Parthenolide
AG-CN2-0455 — 10 mg | 50 mg | 250 mg

Resveratrol
AG-CN2-0033 — 50 mg | 100 mg | 500 mg

LATEST INSIGHT: Resveratrol inhibits NLRP3 inflammasome activation by preserving mitochondrial integrity and augmenting autophagy: Y.P. Chang, et al.; J. Cell Physiol. **230,** 1567 (2015)

Vinpocetine
AG-CN2-0454 — 20 mg | 100 mg

Selected NLRP3 Inflammasome Activators

The Original Source of MSU!

Monosodium urate [MSU]
AG-CR1-3950 (crystals) — 2 mg | 2 x 2 mg
AG-CR1-3951 (ready-to-use solution) — 10 mg

Formula: $C_5H_3N_4O_3$. Na
MW: 167.1 . 23.0
CAS: 1198-77-2

Potent NLRP3 inflammasome activator. ***Biological Activity Tested!***

LIT: Gout-associated uric acid crystals activate the NALP3 inflammasome: F. Martinon, et al.; Nature **440,** 237 (2006)

Other Selected Activators

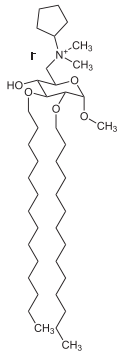
Nigericin . Na
AG-CN2-0020 — 5 mg | 25 mg

LIT: Cryopyrin activates the inflammasome in response to toxins and ATP: S. Mariathasan, et al.; Nature **440,** 228 (2006)

7BIO
MR-C0020 — 10 mg | 50 mg

LIT: Cutting edge: Necrosis activates the NLRP3 inflammasome: H. Li, et al.; J. Immunol. **183,** 1528 (2009)

TLR4/CD14 Antagonists – IAXO Compounds

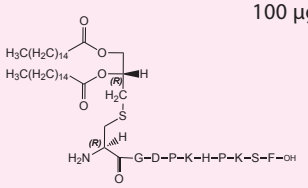


IAXO-101 (CD14/TLR4 Antagonist) (synthetic)	IAX-600-001	1 mg | 5 mg
IAXO-102 (CD14/TLR4 Antagonist) (synthetic)	IAX-600-002	1 mg | 5 mg
IAXO-103 (CD14/TLR4 Antagonist) (synthetic)	IAX-600-003	1 mg | 5 mg
IAXO-201 (Control for IAXO-102)	IAX-600-004	1 mg
IAXO-202 (Control for IAXO-101/IAXO-103)	IAX-600-005	1 mg

TLR Agonists

(R)-FSL-1
AG-CP3-0010 — 100 µg

Formula: $C_{84}H_{140}N_{14}O_{18}S$
MW: 1666.2
CAS: 322455-70-9 (R/S)



Potent stimulator of TLR2/TLR6. The naturally occurring R-stereoisomer is biologically more active than the S-stereoisomer.

Also available: **FSL-1 (AG-CP3-0009)**

Pam_3Cys-Ser-$(Lys)_4$ (TLR1/2 Complex Agonist)
AG-CP3-0003 — 2 mg

Poly(I:C) (Endotoxin-free) (TLR3 Agonist)
IAX-200-021 — 2 mg | 5 mg

MPLA (synthetic) Sterile Solution (TLR4 Agonist)
AG-CU1-0002 — 100 µg

Gardiquimod (TLR7 Agonist)
AG-CR1-3583 — 5 mg | 25 mg

Imiquimod (TLR7 Agonist)
AG-CR1-3569 — 100 mg | 250 mg

Loxoribine (TLR7 Agonist)
AG-CR1-3584 — 5 mg | 25 mg

R-848 (TLR7/8 Agonist)
AG-CR1-3582 — 5 mg | 25 mg

TLR*pure*™ LPS, Lipid A & MPLA
Qualified Purity & TLR4-specific Activity • Ultrapure (no Detectable Protein, RNA & DNA) • Tested in TLR4 KO murine macrophages • Ready-to-use Solutions or Powder • MegaVAX™ BULK Sizes Available • Broadest Range of LPS Chemotype & Serotype Selection

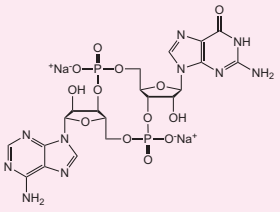
TLR*pure*™ Endotoxin-free & Sterile ODNs
Qualified Purity & Activity • Endotoxin-free & Sterile • Tested in TLR9 KO murine macrophages • BULK Available for *in vivo* Studies

UNIQUE

Cytosolic DNA Sensor

cGAMP . 2Na
AG-CR1-3588 — 100 µg | 500 µg

Formula: $C_{20}H_{24}N_{10}O_{13}P_2$. 2Na
MW: 674.4 . 46.0
CAS: 849214-04-6 (free acid)



Potent STING ligand. Second messenger in human and mouse cells that triggers interferon production in response to cytosolic DNA.

Antiviral & Anti-inflammatory Compounds

10Z-Hymenialdisine
AG-CN2-0067 — 500 µg | 1 mg

Formula: $C_{11}H_{10}BrN_5O_2$
MW: 324.1
CAS: 82005-12-7
Source: *Axinella carteri*

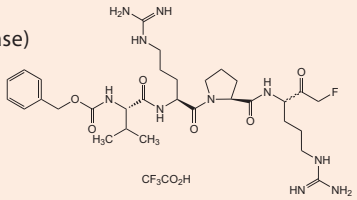
Potent MEK-1 and NF-κB inhibitor. MARK inhibitor. ATP-competitive kinase inhibitor. Inhibits various pro-inflammatory cytokines and nitric oxide.

BULK

Z-VRPR-FMK . TFA
AG-CP3-0008 — 500 µg | 1 mg

Formula: $C_{31}H_{49}FN_{10}O_6 . CF_3CO_2H$
MW: 676.8 . 114.0
CAS: 1381885-28-4 (free base)

Selective MALT1 inhibitor.



BULK

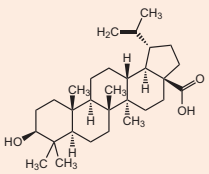
High Purity Betulinic Acid

Betulinic acid
AG-CN2-0417 (>97%) — 100 mg | 500 mg | 1 g
AG-CN2-0415 (>99%) — 5 mg | 25 mg | 100 mg

Source: *Platanus acerifolia* bark

Multifunctional natural product with anti-HIV, anticancer, antimalarial and apoptosis inducing properties. Potent DNA topoisomerase II inhibitor and proteasome activator.

BULK available



Actinonin (synth.) (MMP and Meprin A inhibitor)
AG-CN2-0161 — 5 mg | 25 mg

Aurantimycin A (C5a antagonist)
BVT-0398 — 1 mg | 5 mg

Boromycin (HIV-1 integrase inhibitor)
AG-CN2-0166 — 250 µg | 1 mg

Curvularin (Anti-inflammatory compound)
AG-CN2-0147 — 1 mg | 5 mg

Fuscin (CCR5 receptor antagonist)
AG-CN2-0138 — 1 mg | 2.5 mg

Helenalin (NF-κB inhibitor)
AG-CN2-0435 — 500 µg

Malformin A1 (IL-1β inhibitor) NEW
AG-CN2-0169 — 250 µg | 1 mg

Petasol (HIV-1 Tat transduction inhibitor)
BVT-0439 — 1 mg | 5 mg

Pyranonigrin A (Potent free radical scavenger)
AG-CN2-0156 — 250 µg | 1 mg

Rugulosin (HIV-1 integrase inhibitor)
AG-CN2-0124 — 250 µg | 1 mg

Ruxolitinib (JAK1/JAK2 inhibitor) NEW
AG-CR1-3624 — 5 mg | 25 mg

Tofacitinib (JAK3 inhibitor, Immunosuppressant) NEW
AG-CR1-3625 — 5 mg | 25 mg

Triptolide (Potent immunosuppressant)
AG-CN2-0448 — 1 mg | 5 mg | 10 mg

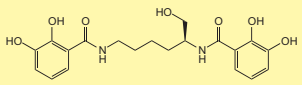
Wogonin (Anti-inflammatory compound)
AG-CN2-0064 — 5 mg | 25 mg

NEW

5-Lipoxygenase Inhibitor

Myxochelin A
AG-CN2-0470 — 100 µg | 1 mg

Formula: $C_{20}H_{24}N_2O_7$
MW: 404.4
CAS: 120243-02-9



LIT: Myxochelins target human 5-lipoxygenase: S. Schieferdecker, et al.; J. Nat. Prod. **78,** 335 (2015)

THE STANDARDS

Potent Immunosuppressants

Cyclosporin A
AG-CN2-0079 — 100 mg | 5 x 100 mg | 1 g

Also available: **Cyclosporin C, D & H**

Ascomycin (high purity)
AG-CN 2-0420 — 1 mg | 5 mg | 25 mg

FTY720 . HCl
AG-CR1-3587 — 1 mg | 5 mg | 25 mg

AdipoGen® LIFE SCIENCES

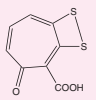
Antimicrobial Compounds

UNIQUE

Tropodithietic acid [TDA]

BVT-0152 1 mg | 5 mg

Formula: $C_8H_4O_3S_2$
MW: 212.3
CAS: 750590-18-2
Source: *Roseobacter gallaeciensis*



Antibiotic. Active against Gram-positive and Gram-negative bacteria. Antifungal and anti-nematodical. Shows antitumor activity. Bacterial signal substance.

Unique Antibiotic Structure

THE STANDARDS

Colistin sulfate (USP Grade)

AG-CN2-0065 100 mg | 1 g | 5 g

Gentamicin sulfate (USP Grade)

AG-CN2-0066 1 g | 5 g | 25 g

Helvolic acid (Potent antibacterial compound)

BVT-0435 1 mg | 5 mg

Meleagrin (Antifouling agent)

AG-CN2-0451 1 mg

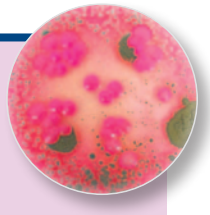
White Line Inducing Principle (Diagnostic tool)

AG-CN2-0069 1 mg

PRODUCT NAME	ACTIVITY	PID	SIZE
Aerothionin	Antibiotic & Antimycobacterial	AG-CN2-0453	1 mg
Antibiotic PF 1052	Antibiotic & Antifungal	BVT-0338	500 µg | 1 mg
Ambuic acid	Quorum sensing modulator	AG-CN2-0129	250 µg | 1 mg
Aranorosin	Antibacterial	AG-CN2-0114	250 µg | 1 mg
Aspterric acid	Antibiotic	AG-CN2-0132	1 mg
Aureothin	Potent Antimicrobial	BVT-0303	1 mg | 5 mg
Aurodox	Protein biosynthetic (EF-Tu) inhibitor	AG-CN2-0133	1 mg | 2.5 mg
Aurofusarin	Mycotoxin	BVT-0392	1 mg | 5 mg
Bacimethrin	Antibiotic	BVT-0226	500 µg | 1 mg
Chaetoglobosin A	Antibiotic & Anticancer	BVT-0092	1 mg | 5 mg
Enterocin	Antibacterial	AG-CN2-0116	250 µg | 1 mg
Kirromycin	Protein biosynthesis inhibitor	BVT-0157	1 mg | 5 mg
Hormaomycin	Quorum sensing inhibitor	BVT-0107	500 µg | 1 mg
Luteoreticulin NEW	Insecticidal & Nematocidal	BVT-0457	500 µg | 1 mg
Lysolipin I	Antibiotic & Antifungal	BVT-0037	500 µg | 1 mg
Malformin A1	Antibiotic	AG-CN2-0169	250 µg | 1 mg
Malformin C (synthetic)	Peptide Antibiotic & Anticancer	AG-CN2-0107	250 µg | 1 mg
Nargenicin A1	Antibacterial against Gram-positive	BVT-0204	1 mg | 5 mg
Nocardamine	Siderophore	AG-CN2-0150	1 mg | 5 mg
Pikromycin	PREP inhibitor	BVT-0400	1 mg | 5 mg
Pseurotin A	Antibiotic	BVT-0003	1 mg | 5 mg
γ-Rubromycin	Antibiotic & Antiviral	BVT-0007	1 mg | 5 mg
Siamycin I	Quorum sensing inhibitor	AG-CN2-0146	1 mg | 5 mg
Simocyclinone D8	Bacterial DNA gyrase inhibitor	BVT-0290	500 µg | 1 mg
Strobilurin B	Antifungal	BVT-0312	500 µg | 1 mg
Thailandolide B	Antibiotic	AG-CN2-0160	1 mg | 5 mg
Viomellein	Antibacterial & Insecticidal	BVT-0359	500 µg | 1 mg
Zelkovamycin	Antibacterial	AG-CN2-0128	250 µg | 1 mg

New Additions! **Quorum Sensing Modulators**

Comprehensive Panel of over 30 Homoserine-lactones from the Manufacturer!



Visit www.adipogen.com for a Complete Overview!

AMPK Modulators

AMPK (AMP-activated protein kinase) is an enzyme that plays a role in cellular energy homeostasis, regulating several intracellular systems including hepatic fatty acid oxidation and ketogenesis, inhibition of cholesterol synthesis, lipogenesis and triglyceride synthesis, stimulation of skeletal muscle fatty acid oxidation and muscle glucose uptake as well as modulation of insulin secretion by pancreatic β cells.

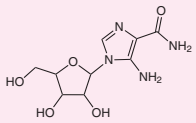
SELECTED REVIEW: Past strategies and future directions for identifying AMP-activated protein kinase (AMPK) modulators: S.E. Sinnett & J.E. Brenman; Pharmacol. Ther. **143,** 111 (2014)

AICAR

AG-CR1-0061 — 10 mg | 50 mg | 100 mg

Formula: $C_9H_{14}N_4O_5$
MW: 258.2
CAS: 2627-69-2

Cell permeable AMP-activated protein kinase (AMPK) activator. Insulin mimetic.



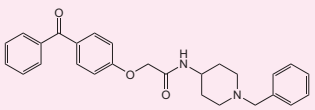
NEW

AdipoRon

AG-CR1-0154 — 10 mg | 50 mg

BULK | Original Source

Formula: $C_{27}H_{28}N_2O_3$
MW: 428.5
CAS: 924416-43-3



AdipoR agonist. AMPK & PGC1α activator. Improves diabetes, glucose and lipid metabolism and insulin sensitivity.

LIT: A small-molecule AdipoR agonist for type 2 diabetes and short life in obesity: M. Okada-Iwabu, et al.; Nature **503,** 493 (2013) • Cell Biology. Ronning after the adiponectin receptors: W.L. Holland & P.E. Scherer; Science **342,** 1460 (2013)

Other AMPK Modulators

Sauchinone (AMPK activator)
AG-CN2-0032 — 1 mg | 5 mg

(-)-Epigallocatechin gallate [EGCG] (AMPK activator)
AG-CN2-0063 — 25 mg | 100 mg

Piceatannol
(Promotes AMPK phosphorylation & GLUT4 translocation)
AG-CN2-0086 — 1 mg | 5 mg | 25 mg

MOTS-c (human) (AMPK Inducer) NEW
AG-CP3-0026 — 1 mg | 5 mg

Also available

Compound 112254 (AMPK activator)
AG-CR1-0155 — 10 mg | 50 mg

Compounds with increased Solubility

AdipoRon . HCl (water soluble) — AG-CR1-0156
Compound 112254 . HCl (water soluble) — AG-CR1-0157

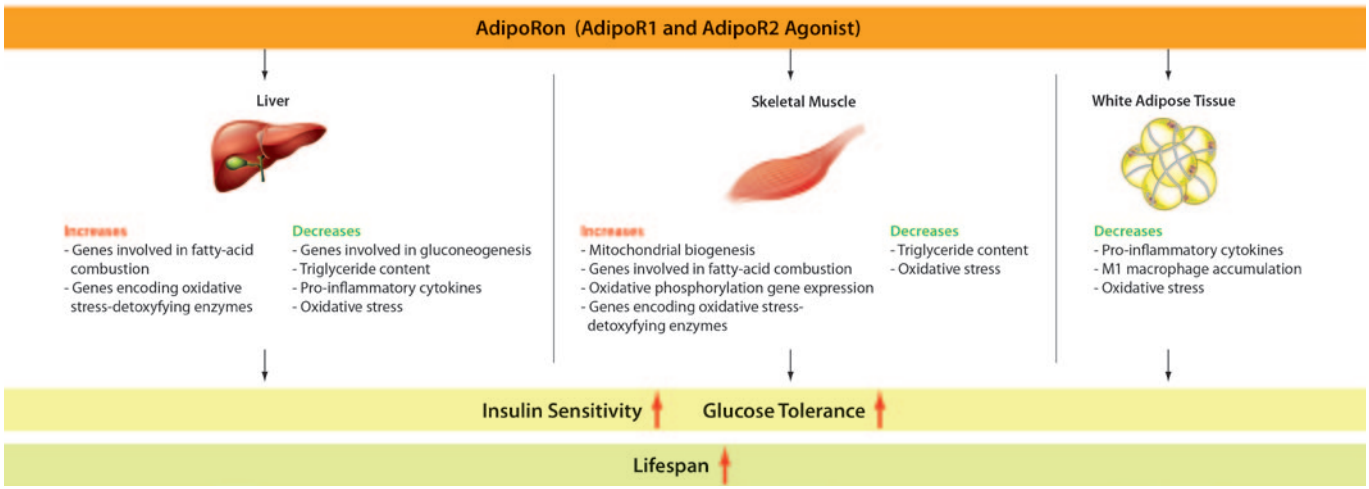


FIGURE: Mechanism of Action of AdipoRon. *Adapted from M. Okada-Iwabu, et al.; Nature **503,** 493 (2013)*

PPAR Agonists

PPARγ is a nuclear receptor that is highly expressed in adipose tissue and is a master regulator of adipogenesis. PPARγ is selectively activated by a class of anti-diabetic agents, the thiazolidinediones (TZD), which ameliorate insulin resistance, increase peripheral glucose utilization and improve serum lipid levels. TZDs where shown to activate PPARγ, which through PRDM16 and the deacetylase sirtuin1 (SIRT1), promote the browning of white fat, which goes in line with the crosstalk between PPARγ and the growth factors FGF-1 and FGF-21 in maintaining healthy adipose tissue. Additionally, free fatty acids (FFA) mobilized by adipose triglyceride lipase (ATGL) and hormone sensitive lipase (HSL) activate PPARα and PPARδ to promote the expression of brown adipocytes genes.

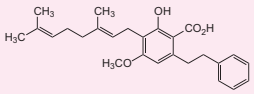
SELECTED REVIEW: PPARγ signaling and metabolism: the good, the bad and the future: M. Ahmadian, et al.; Nat. Med. **19,** 557 (2013)

NEW

Amorfrutin B

AG-CN2-0464 — 500 µg

Formula: $C_{26}H_{32}O_4$
MW: 408.5
CAS: 1174387-94-0
Source: *Amorpha fruticosa*



Natural PPARγ agonist with potent glucose-lowering properties.

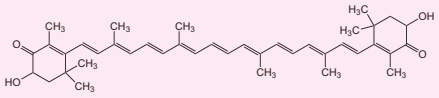
Also available: **Amorfrutin A (AG-CN2-0462)**

Astaxanthin

AG-CN2-0055 — 5 mg | 25 mg

Formula: $C_{40}H_{52}O_4$
MW: 596.8
CAS: 472-61-7
Source: *Synthetic*

PPARα agonist and PPARγ antagonist. Increases insulin sensitivity. Attenuates diabetes associated coagulatory, oxidative and inflammatory stress. Shows positive effects on obesity and insulin resistance.



Ask for favorable BULK Prices!

Thiazolidinediones (TZDs)

Ciglitazone (Selective PPARγ agonist)
AG-CR1-0033 — 1 mg | 5 mg | 25 mg

Pioglitazone (Selective PPARγ agonist)
AG-CR1-0067 — 1 mg | 5 mg | 25 mg

Rosiglitazone (Potent PPARγ agonist)
AG-CR1-3570 — 25 mg | 100 mg | 1 g

Rosiglitazone . maleate (Potent PPARγ agonist)
AG-CR1-3571 — 25 mg | 100 mg | 1 g

Troglitazone (Potent and selective PPARγ agonist)
AG-CR1-3565 — 5 mg | 25 mg

Other PPAR Modulators

Asiatic acid (PPARγ inhibitor)
AG-CN2-0400 — 5 mg | 25 mg

Curcumin (high purity) (PPARγ pathway activator)
AG-CN2-0059 — 10 mg | 50 mg | 250 mg

Genistein (Activates all PPAR isoforms)
AG-CN2-0427 — 10 mg | 50 mg | 250 mg

GW1929 (Selective PPARγ agonist) BULK
AG-CR1-0116 — 1 mg | 5 mg | 25 mg

Ionomycin (free acid) (PPARγ ligand with a unique binding mode)
AG-CN2-0416 — 1 mg | 5 mg

Pseudolaric acid B (PPARα agonist)
AG-CN2-0083 — 100 µg | 1 mg

WY-14643 [Pirinic acid] (Potent PPARα activator)
AG-CR1-3566 — 10 mg | 50 mg | 250 mg

BULK

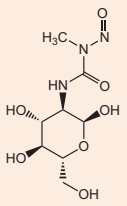
High Purity Streptozotocin

STANDARD Diabetes Inducer

Streptozotocin

AG-CN2-0046-M050 — 50 mg
AG-CN2-0046-M250 — 250 mg
AG-CN2-0046-G001 — 1 g

Formula: $C_8H_{15}N_3O_7$
MW: 265.2
CAS: 18883-66-4



α-Glucosidase Inhibitors

Aloeresin A
AG-CN2-0439 — 500 µg

Deoxynojirimycin
BVT-0112 — 1 mg | 5 mg

Luteolin
AG-CN2-0098 — 5 mg | 25 mg

Pellitorine
AG-CN2-0009 — 1 mg | 5 mg

Vitexin
AG-CN2-0425 — 5 mg | 25 mg

N-Methyl-1-deoxynojirimycin
BVT-0130 — 1 mg

Sirtuin (SIRT) Modulators

AK-7 (Brain-permeable SIRT2 inhibitor)
AG-CR1-3511 — 5 mg | 25 mg

Hyperforin . DCHA (Potent SIRT1/SIRT2 inhibitor)
AG-CN2-0008 — 500 µg | 1 mg

Quercetin . dihydrate (SIRT1 activator)
AG-CN2-0409 — 1 g | 5 g

Resveratrol (Potent SIRT1 activator) BULK
AG-CN2-0033 — 50 mg | 100 mg | 500 mg

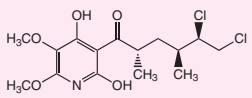
Sirtinol (Cell permeable SIRT1 inhibitor) BULK
AG-CR1-0055 — 1 mg | 5 mg | 25 mg

Suramin . 6Na (SIRT1 and SIRT5 inhibitor) BULK
AG-CR1-3575 — 50 mg | 250 mg | 1 g

Mitochondrial Modulators

Atpenin A5 (synthetic)
AG-CN2-0100 — 250 µg | 1 mg

Formula: $C_{15}H_{21}Cl_2NO_5$
MW: 366.2
CAS: 119509-24-9



Potent and specific mitochondrial complex II (succinate-ubiquinoneoxidoreductase) inhibitor.

Asteltoxin (Mitochondrial respiration inhibitor)
AG-CN2-0441 — 250 µg

Citrinin (MPTP activator)
AG-CN2-0101 — 1 mg | 5 mg | 25 mg

Harzianopyridone (Mitochondrial complex II inhibitor)
AG-CN2-0149 — 250 µg | 1 mg

Iromycin A (Mitochondrial electron transport inhibitor)
BVT-0262 — 500 µg | 1 mg | 5 mg

PK 11195 (Benzodiazepine receptor antagonist)
AG-CR1-0008 — 10 mg | 50 mg

Propionyl-L-carnitine (Mitochondrial metabolism stimulator)
AG-CR1-3595 — 25 mg | 100 mg | 500 mg

Mitochondrial Membrane Potential Probes

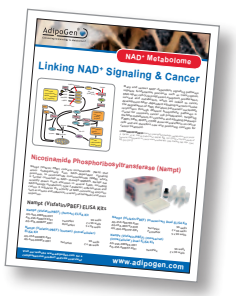
JC-10 (high purity) | JC-1 iodide see backcover

Potent Nampt/Visfatin Inhibitors from the Manufacturer!

CHS-828 BULK
AG-CR1-0064 — 5 mg | 25 mg

FK-866
AG-CR1-0011 — 1 mg | 5 mg

Ask for the NAD⁺ Metabolome Product Flyer!



Reagents for Cardiovascular Research

Agistatin B (Cholesterol biosynthesis inhibitor)
BVT-0223 — 1 mg | 5 mg
Also available: **Agistatin D & E**

Decarestrictine D (Cholesterol biosynthesis inhibitor)
BVT-0283 — 1 mg | 5 mg

Beauvericin (ACAT inhibitor)
AG-CN2-0043 — 1 mg | 5 mg

(3S,6R)-Lateritin (ACAT inhibitor)
AG-CN2-0042 — 1 mg

(R,R)-Hymeglusin (HMG-CoA synthase inhibitor)
AG-CN2-0103 — 0.5 mg | 1 mg | 2.5 mg

Lovastatin (HMG-CoA reductase inhibitor)
AG-CN2-0051 — 5 mg | 25 mg

Penicillide (ACAT inhibitor)
AG-CN2-0122 — 250 µg | 1 mg

Pyripyropene A (Specific ACAT2 inhibitor)
AG-CN2-0106 — 250 µg | 1 mg

Sclerotiorin (CETP activity inhibitor)
AG-CN2-0054 — 0.5 mg | 1 mg | 5 mg

Simvastatin (HMG-CoA reductase inhibitor)
AG-CN2-0052 — 10 mg | 50 mg

Terpendole C (ACAT1/ACAT2 & CE synth. inhibitor)
AG-CN2-0125 — 250 µg | 1 mg

Terpendole E (ACAT inhibitor)
AG-CN2-0127 — 250 µg | 1 mg

Broad Range of Metabolic Research Reagents

Altenusin (MLCK inhibitor)
AG-CN2-0143 — 1 mg | 5 mg

Amlexanox (Selective TBK1 and IKKε inhibitor)
AG-CR1-3579 — 10 mg | 50 mg

Amidepsine A (DGAT inhibitor) BULK
AG-CN2-0109 — 1 mg | 2.5 mg

Amidepsine D (DGAT inhibitor)
AG-CN2-0110 — 1 mg | 2.5 mg

BRS-3 Agonist (Bombesin receptor subtype-3)
AG-CR1-3607 — 500 µg

Celastrol (Potent leptin sensitizer)
AG-CN2-0460 — 5 mg | 10 mg | 50 mg

DPVP (Adipogenesis inhibitor)
AG-CR1-3604 — 1 mg

EM574 (Orexigenic; Motilin receptor agonist)
AG-CN2-0102 — 250 µg | 1 mg

Emodin (Potent selective 11β-HSD1 inhibitor)
AG-CN2-0457 — 50 mg | 250 mg

Empagliflozin (SGLT-2 inhibitor)
AG-CR1-3619 — 10 mg | 50 mg

Geodin (Glucose uptake stimulator)
AG-CN2-0139 — 1 mg | 5 mg

Itaconic acid (PFKII inhibitor)
AG-CN2-0426 — 1 g | 5 g

Kaempferitrin (Insulinomimetic/Hypoglycemic)
AG-CN2-0039 — 1 mg | 5 mg

Linagliptin (DPP4 inhibitor)
AG-CR1-3618 — 10 mg | 50 mg

Orlistat (DAGLα inhibitor; Antiobesity compound) BULK
AG-CN2-0050 — 50 mg | 250 mg

Salsalate (Anti-inflammatory and antidiabetic)
AG-CR1-3574 — 1 g | 5 g

Skyrin (Antidiabetic compound)
AG-CN2-0001 — 1 mg

Stevioside (Antidiabetic compound) BULK
AG-CN2-0077 — 10 mg | 50 mg

BULK

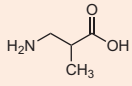
BAIBA

LATEST INSIGHT: The contracting muscle has been shown to act as an endocrine organ, secreting "myokines" that participate in tissue crosstalk. L.D. Roberts, et al. (2014) recently identified the substance BAIBA as a contraction-induced myokine that results in browning of white adipose tissue and increases fat oxidation in the liver.

LIT: β-Aminoisobutyric acid induces browning of white fat and hepatic β-oxidation and is inversely correlated with cardiometabolic risk factors: L.D. Roberts, et al.; Cell Metab. **19,** 96 (2014)

3-Aminoisobutyric acid (BAIBA)
AG-CR1-3596-M250 — 250 mg | 1 g

Formula: $C_4H_9NO_2 \cdot H_2O$
MW: 103.1 . 18.0
CAS: 214139-20-5



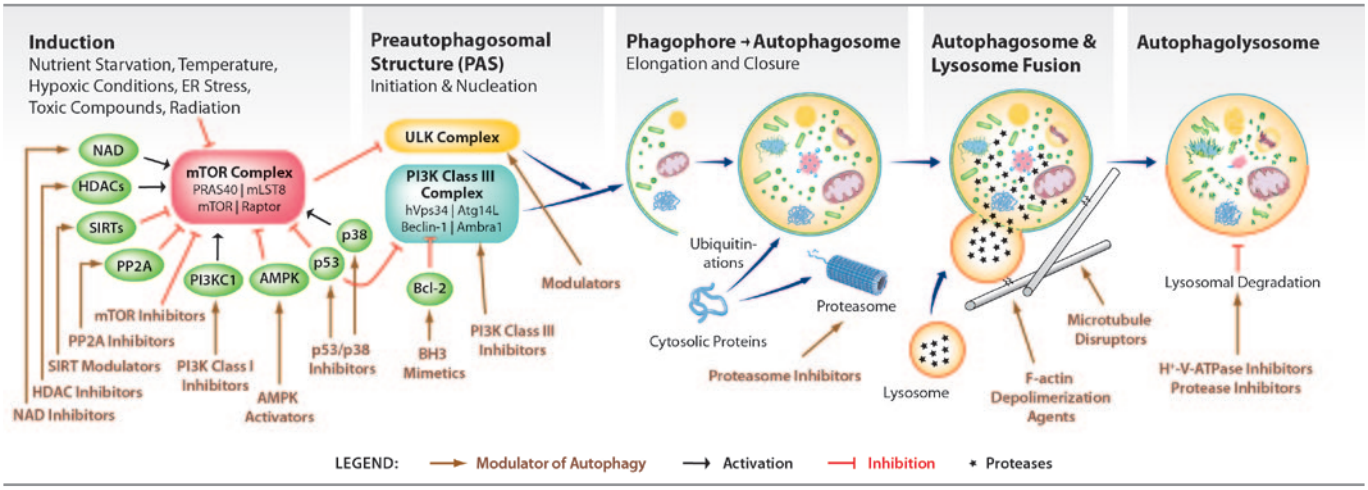
Also available:
(R)-BAIBA (CDX-A0148) | **(S)-BAIBA** (CDX-A0147)

Modulators of Autophagy Signaling

Autophagy represents a homeostatic cellular mechanism for the turnover of organelles and proteins through a lysosome-dependent degradation pathway. Misfolded or aggregated proteins are removed, damaged organelles such as mitochondria, endoplasmic reticulum and peroxisomes are cleared and intracellular pathogens are eliminated. During starvation, autophagy facilitates cell survival through the recycling of metabolic precursors.

Despite the widely accepted role for autophagy in **cellular survival**, it also has been associated with the regulation of various **cell death pathways**, including regulated (e.g. apoptosis, pyroptosis and necroptosis) and catastrophic (e.g. necrosis) types of cell death. Furthermore it plays a vital role in **innate and adaptive immune mechanisms**. Taken together, autophagy might play a key role in preventing diseases such as cancer, neurodegeneration, cardiomyopathy, diabetes, liver diseases, autoimmune diseases and infections. Strategies aiming to modulate autophagy, such as small molecule activators and inhibitors, might help to elucidate the biological processes behind.

Schematic overview on mammalian macroautophagy, including selected physiological and small molecule modulators



Browse the Catalog Sections for Target-specific Small Molecules!

See Pages 6–8 for AMPK Activators, NAD Inhibitors & SIRT Modulators!
See Pages 12, 19 & 24 for PI3K/mTOR Modulators & HDAC Inhibitors!
See Pages 11 & 14 for Microtubule Disruptors, H⁺-V-ATPase & Proteasome Inhibitors!

PP2A Inhibitors

NEW

NEW Selective PP2A inhibitors

Rubratoxin A
AG-CN2-0092 — 250 µg | 500 µg

Cytostatin
AG-CN2-0093 — 250 µg

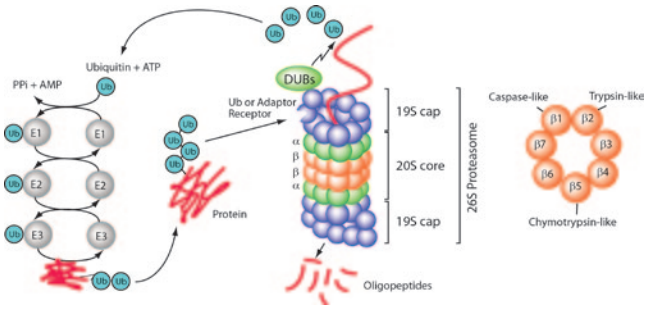
The Source for Okadaic acids!

Okadaic acid (high purity)
AG-CN2-0056 — 25 µg | 100 µg | 1 mg

Also available as ammonium, sodium and potassium salts!

Fostriecin
AG-CN2-0057 — 10 µg

The Ubiquitin-Proteasome System (UPS)



The **ubiquitin-proteasome system (UPS)** and the autophagic-lysosomal pathway are the two major **degradation systems** for both native and misfolded proteins in eukaryotic cells. The regulated proteolysis of bulk and misfolded proteins is strictly controlled by the 26S proteasome complex, which consists of the 19S regulatory cap and the 20S proteaseome core. Although eukaryotic 20S proteasomes harbor seven different β-subunits in their two-fold symmetrical α7β7β7α7 stacked complexes, only three β-subunits per β-ring **[subunits β1 (caspase-like), β2 (trypsin-like) and β5 (chymotrypsin-like)]** are proteolytically active. These three β-subunits are major targets for small molecule proteasome inhibitors. **Proteasome inhibition** has implications in a number of human diseases such as cancer, inflammation and ischemic stroke and is an important therapeutic target.

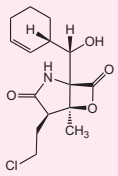
NEW

Potent 20S Proteasome Inhibitor

Salinosporamide A

AG-CN2-0444-C100 — 100 µg

Formula: $C_{15}H_{20}ClNO_4$
MW: 313.8
CAS: 437742-34-2
Source: *Salinospora tropica*

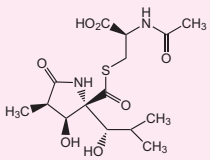


Inhibits all three catalytic activities: chymotrypsin-like (EC_{50} = 3.5nM); trypsin-like (EC_{50} = 28nM); caspase-like (EC_{50} = 430nM).

Lactacystin

AG-CN2-0104 — 100 µg | 200 µg | 500 µg | 1 mg

Formula: $C_{15}H_{24}N_2O_7S$
MW: 376.4
CAS: 133343-34-7
Source: *Streptomyces lactacystinnaeus*



Potent and selective irreversible proteasome inhibitor. Specifically inhibits 20S proteasome.

THE STANDARDS

Standard Proteasome Inhibitors – *From the Source!*

PRODUCT NAME	DESCRIPTION	PID
Bortezomib [PS-341]	Chymotrypsin-like and caspase-like activity inhibitor.	AG-CR1-3602
Epoxomicin	Predominant chymotrypsin-like activity inhibitor.	AG-CN2-0422
clasto-Lactacystin β-lactone	Chymotrypsin-like, trypsin-like and caspase-like activity inhibitor.	AG-CN2-0442
Z-Leu-Leu-Phe-CHO [MG-110]	Chymotrypsin-like activity inhibitor.	AG-CP3-0021
Z-Leu-Leu-Nva-CHO [MG-115]	Chymotrypsin-like activity inhibitor.	AG-CP3-0015
Z-Leu-Leu-Leu-CHO [MG-132]	Chymotrypsin-like and caspase-like activity inhibitor.	AG-CP3-0011
Z-Leu-Leu-Leu-B(OH)2 [MG-262]	Chymotrypsin-like and caspase-like activity inhibitor.	AG-CP3-0024
b-AP15 [DUB Inhibitor] Solution	Inhibitor of the 19S deubiquitinases (DUBs), ubiquitin-specific-processing protease 14 (USP14) and ubiquitin C-terminal hydrolase isozyme L5 (UCHL5).	AG-CS1-0102

Fluorescent Probes for Proteasome Activity Measurement

Me_4BodipyFL-Ahx$_3$Leu$_3$VS	Cell permeable fluorescent proteasome activity probe.	AG-CR1-3601
Ac-Arg-Leu-Arg-AMC	Fluorogenic substrate for the trypsin-like activity of the 20S proteasome.	AG-CP3-0013
Boc-Leu-Arg-Arg-AMC	Fluorogenic substrate for the trypsin-like activity of the 20S proteasome.	AG-CP3-0014
Suc-Leu-Leu-Val-Tyr-AMC	Fluorogenic substrate for measuring the chymotrypsin-like activity of the 20S proteasome.	AG-CP3-0016
Suc-Leu-Tyr-AMC	Fluorogenic substrate for the chymotrypsin-like activity of the 20S proteasome.	AG-CP3-0017
Z-Leu-Leu-Leu-AMC	Fluorogenic substrate for the chymotrypsin-like activity of the 20S proteasome.	AG-CP3-0019
Z-Leu-Leu-Glu-AMC	Fluorogenic substrate for the caspase-like activity of the 20S proteasome.	AG-CP3-0022

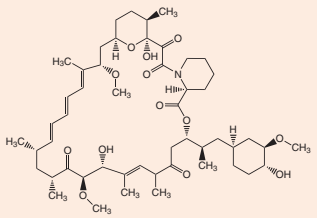
PI3K Class I & Class III Inhibitors and mTOR Modulators

BULK

Rapamycin

AG-CN2-0025 — 100 µg | 1 mg | 5 mg | 25 mg

Formula: $C_{51}H_{79}NO_{13}$
MW: 914.2
CAS: 53123-88-9
Source: *Streptomyces hygroscopicus*



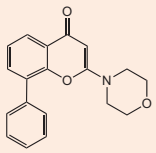
Antitumor compound. Forms a complex with FKBP12 and inhibits the mammalian target of rapamycin (mTOR). Potent immunosuppressant used as an alternative to calcineurin inhibitors.

BULK

LY-294,002

AG-CR1-0108 — 1 mg | 5 mg | 25 mg

Formula: $C_{19}H_{17}NO_3$
MW: 307.4
CAS: 154447-36-6



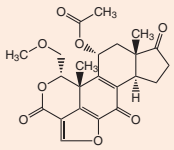
Antitumor compound.
pan-Class I / II / III PI3K inhibitor.
Acts on the ATP-binding site of the enzyme. In solution more stable than wortmannin. Inhibitor of BET bromodomain proteins BRD2, BRD3 and BRD4.

BULK

Wortmannin

AG-CN2-0023 — 1 mg | 5 mg | 25 mg

Formula: $C_{23}H_{24}O_8$
MW: 428.4
CAS: 19545-26-7



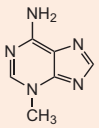
Antitumor compound. Potent cell permeable and selective inhibitor of phosphatidyl-inositol 3-kinase (PI3K). Shows similar potency *in vitro* for the class I, II, and III PI3K.

BULK

3-Methyladenine

AG-CR1-3597 — 25 mg | 100 mg | 250 mg

Formula: $C_6H_7N_5$
MW: 149.2
CAS: 5142-23-4



Antitumor compound. Blocks class I, class II and class III PI3Ks, including some downstream targets. Blocks class I PI3K persistently and class III PI3K transiently.

PRODUCT NAME	PID	INHIBITION
AS-252424	SYN-1009	PI3K
AZD-2014	SYN-1167	mTORC1/2
AZD-8055	SYN-1166	PI3K Class I
BEZ235	SYN-1018	PI3K/mTOR
BGT226	SYN-1178	PI3K/Akt
BKM120	SYN-1200	PI3Kα Class I
CH5132799	SYN-1146	PI3Kα Class I
GDC-0032	SYN-1202	PI3K
GDC-0941	SYN-1041	PI3K Class I
GNE-477	SYN-1148	PI3K/mTOR
GNE-490	SYN-1114	pan-PI3K
GNE-493	SYN-1115	pan-PI3K
GSK2126458	SYN-1126	PI3K
IC87114	SYN-1045	PI3K δ Class I
IPI-145	SYN-1175	PI3K Class I
KU-0063794	SYN-1050	mTORC1/2
MLN0128	SYN-1157	mTORC1/2

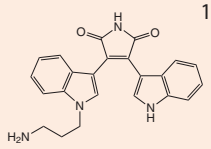
PRODUCT NAME	PID	INHIBITION
NIBR-17	SYN-1145	pan-PI3K Class I
PF-04979064	SYN-1194	PI3K/mTOR
PI103	SYN-1065	PI3K Class I
PIK-75	SYN-1067	PI3K p110α
PIK-90	SYN-1068	PI3K
PIK-93	SYN-1066	PI3Kα /PI4Kβ
PP242	SYN-1181	mTOR/PI3K
Prodigiosin	AG-CN2-0105	mTORC1/2
RG7422	SYN-1150	PI3K/mTOR
S14161	AG-CR1-3516	PI3K Class I
TASP0415914	SYN-1208	PI3Kγ
TG100115	SYN-1105	PI3Kγ/δ Class I
TGX-221	SYN-1089	PI3K
Viridiol	AG-CN2-0126	PI3K Class III / I
XL388	SYN-1186	mTOR
XL765	SYN-1137	PI3K Class I
ZSTK474	SYN-1099	pan-PI3K

Broad Panel of Protein Kinase Modulators

BULK

Bisindolylmaleimide III
AG-CR1-0112 — 1 mg | 5 mg

Formula: $C_{23}H_{20}N_4O_2$
MW: 384.4
CAS: 137592-43-9

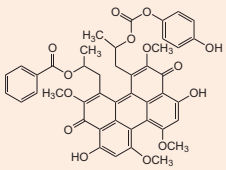


Also available:
Full Panel of Bisindolylmaleimides I-XI

BULK

Calphostin C
AG-CN2-0430 — 100 µg | 1 mg

Formula: $C_{44}H_{38}O_{14}$
MW: 790.8
CAS: 121263-19-2
Source: *Cladosporium cladosporioides* sp.

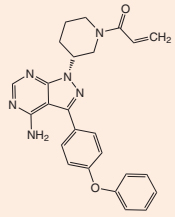


Potent and highly specific cell permeable PKC inhibitor. Wnt/β-catenin/lef-1 signaling inhibitor.

BULK

Ibrutinib
AG-CR1-3620 — 5 mg | 25 mg

Formula: $C_{25}H_{24}N_6O_2$
MW: 440.5
CAS: 936563-96-1



Potent and highly selective Bruton's tyrosine kinase (BTK) inhibitor with antineoplastic activity.

THE SOURCE BULK

Protein Tyrosine Kinase Inhibitors

Herbimycin A | PP1 | PP2 | Radicicol

Potent PKC Inhibitors

Staurosporines **see Page 23**

Cercosporin (Potent PKC inhibitor)
AG-CN2-0111 — 1 mg | 5 mg

Chelerythrine chloride (Potent PKC inhibitor)
AG-CR1-0071 — 1 mg | 5 mg | 25 mg

Anomalin A (Lck inhibitor)
AG-CN2-0006 — 1 mg

BAY 11-7082 (IkBa kinase inhibitor)
AG-CR1-0013 — 10 mg | 50 mg

BAY 43-9006 [Sorafenib] (Raf kinase inhibitor)
AG-CR1-0025 — 1 mg | 5 mg | 25 mg

Debromohymenialdisine (PKC & MEK-1 inhibitor)
AG-CN2-0068 — 100 µg

H-8 . 2HCl (PKA and PKG inhibitor) BULK
AG-CR1-0001 — 10 mg | 50 mg

H-89 . 2HCl (PKA and PKG inhibitor) BULK
AG-CR1-0002 — 1 mg | 5 mg | 25 mg

(-)-Indolactam V (PKC inducer)
AG-CR1-0041 — 300 µg | 1 mg

Ingenol-3-angelate (Specific PKC activator)
AG-CN2-0012 — 1 mg | 5 mg

MS-1020 (Selective JAK3 inhibitor)
AG-CR1-3501 — 1 mg

PD 184,352 (MEK-1 inhibitor)
AG-CR1-0029 — 1 mg | 5 mg

SB202190 (p38 MAPK inhibitor)
AG-CR1-0028 — 1 mg | 5 mg | 25 mg

SMI-4a (Pim1 & Pim2 inhibitor)
AG-CR1-3503 — 5 mg

Tripolin A (Aurora A kinase inhibitor)
AG-CR1-3520 — 1 mg | 5 mg

Tripolin B (Aurora A & B modulator)
AG-CR1-3521 — 1 mg

CDK, GSK & Dyrk Inhibitors

Alsterpaullone (CDK1/GSK-3β inhibitor)
AG-CR1-0036 — 1 mg | 5 mg

6BIO (Potent GSK-3α/β inhibitor)
AG-CR1-0056 — 1 mg | 5 mg | 25 mg

(R)-CR8 (CDK1/2/5/7/9, CK1δ/ε & GSK-3α/β inhibitor)
AG-CR1-0039 — 1 mg | 5 mg

(S)-CR8 (CDK1/2/5/9, CK1δ/ε & Dyrk1A inhibitor)
AG-CR1-0040 — 1 mg | 5 mg

Manzamine A (GSK-3β inhibitor)
AG-CN2-0438 — 500 µg

NU6102 (Potent CDK1/CDK2 inhibitor)
AG-CR1-0020 — 1 mg | 5 mg

Phenylmethylene hydantoin (GSK-3β inhibitor)
AG-CN2-0041 — 1 mg

RO-3306 (Selective CDK1 inhibitor)
AG-CR1-3515 — 1 mg | 5 mg

(R)-Roscovitine (Potent CDK inhibitor)
AG-CR1-0006 — 1 mg | 5 mg | 50 mg

Also available:
(S)-CR8 | (S)-Roscovitine | (R)-Perharidine 1

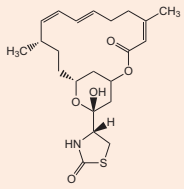
Microtubule & F-actin Modulators

THE SOURCE BULK

Latrunculin A
AG-CN2-0027 — 100 µg | 500 µg

Formula: $C_{22}H_{31}NO_5S$
MW: 421.6
CAS: 76343-93-6
Source: *Latrunculia magnifica*

Actin polymerization inhibitor. Potent phagocytosis inhibitor. Anticancer compound. Inhibits tumor cell invasion.

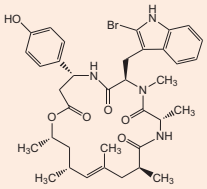


THE SOURCE BULK

Jasplakinolide
AG-CN2-0037 — 50 µg | 100 µg

Formula: $C_{36}H_{45}BrN_4O_6$
MW: 709.7
CAS: 102396-24-7
Source: *Jaspis splendens*

Cell permeable, non-fluorescent F-actin probe. Potent inducer of actin polymerization and stabilization. Tool used for autophagy/phagocytosis research.

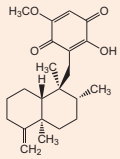


THE SOURCE BULK

Ilimaquinone
AG-CN2-0038 — 100 µg

Formula: $C_{22}H_{30}O_4$
MW: 358.5
CAS: 71678-03-0
Source: *Anthelia* sp.

Cytoplasmic microtubule inhibitor. Cell permeable, antimicrobial, anti-inflammatory, antimitotic and cytotoxic compound.



Colcemid (Microtubule assembly inhibitor) BULK
AG-CR1-3567 — 1 mg | 5 mg

Colchicine (Microtubule assembly inhibitor) BULK
AG-CN2-0048 — 500 mg | 1 g

Curvulin (Microtubule assembly inhibitor)
BVT-0097 — 1 mg | 5 mg

Ferulenol (Stimulator of tubulin polymerization)
AG-CN2-0011 — 1 mg | 5 mg | 10 mg

Ilimaquinone (Microtubule inhibitor)
AG-CN2-0038 — 100 µg

Nocodazole (Tubulin depolymerization promoter)
AG-CR1-0019 — 5 mg | 10 mg | 25 mg | 50 mg

Podophyllotoxin (Microtubule assembly inhibitor)
AG-CN2-0049 — 100 mg

Paclitaxel (Microtubule assembly stabilizer)
AG-CN2-0045 — 1 mg | 5 mg | 25 mg | 100 mg

Thiocolchicine (Tubulin polymerization inhibitor) NEW
AG-CN2-0074 — 5 mg | 25 mg

Vincristine . sulfate (Depolymerizes microtubules)
AG-CN2-0446 — 5 mg | 25 mg

F-actin Modulators

Cytochalasin H (Actin polymerization inhibitor)
BVT-0447 — 1 mg | 5 mg

Cytochalasin J (Actin and myosin inhibitor)
BVT-0450 — 1 mg | 5 mg

Dynasore BULK
AG-CR1-0045 — 5 mg | 25 mg

Latrunculin B BULK
AG-CN2-0031 — 1 mg

16-epi-Latrunculin B
AG-CN2-0034 — 100 µg

Swinholide A
AG-CN2-0035 — 10 µg | 50 µg

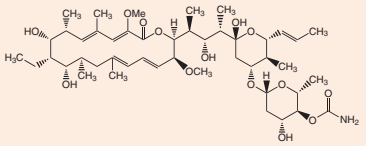
H^+-V-ATPase Inhibitors

THE SOURCE BULK

Concanamycin A (high purity)
BVT-0237 — 25 µg | 100 µg | 1 mg

Formula: $C_{46}H_{75}NO_{14}$
MW: 866.1
CAS: 80890-47-7
Source: *Streptomyces* sp.

Potent and specific H^+-ATPase inhibitor.



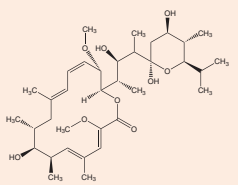
Also available: **Concanamycin B & C**

THE SOURCE BULK

Bafilomycin A_1 (high purity)
BVT-0252 — 100 µg | 1 mg

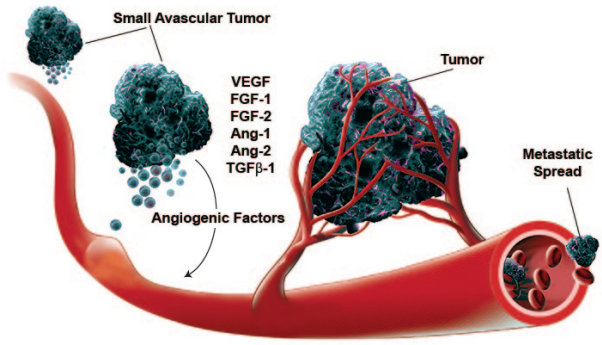
Formula: $C_{35}H_{58}O_9$
MW: 622.8
CAS: 88899-55-2
Source: *Streptomyces griseus*

Specific vacuolar-type H^+-ATPase inhibitor. Distinguishes among different types of ATPases.



Also available: **Bafilomycin B_1 & C_1**

Angiogenesis (VEGF) Modulators



Angiogenesis is a vital and complex biological process, forming new capillaries from pre-existing blood vessels and infusing tissue with supplies of oxygen and nutrients. It plays an important role in physiological conditions such as reproduction, development, wound healing and tissue repair. Aberrant angiogenesis is a crucial mediator in a growing list of diseases such as cancer, chronic inflammatory diseases, atherosclerosis and diabetic retinopathy. The process of angiogenesis is tightly regulated with the involvement of several cell types interacting with each other as well as with the surrounding microenvironment.

Angiogenesis, especially also in tumor, is induced by hypoxia, leading to expression and stabilization of HIF-1α, a transcription factor that responds to changing oxygen levels, and consequently the transcription of angiogenesis-promoting genes, leading to the upregulation of pro-angiogenic factors, such as VEGF, PDGF, FGF or TGFβ. Pro-angiogenic factors activate signaling pathways, such as PI3K/Akt, Erk1/2, Smad and Notch, which result in endothelial cells (ECs) proliferation and migration of the pre-existing vasculature to sprout and increase vascularization of the tissue. Extensive research continues on anti-angiogenic therapies (biologicals or small molecules) that combat cancer by preventing access to the blood supply that is critical for tumor growth and survival.

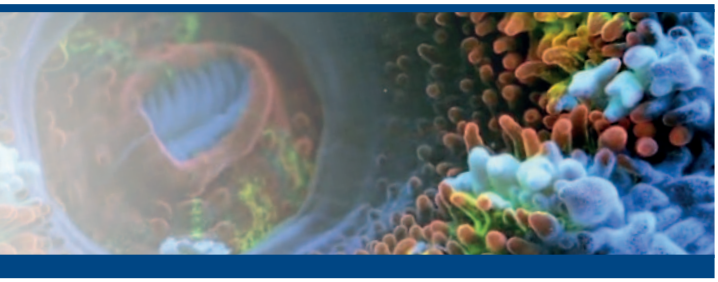
SELECTED REVIEWS: Cancer prevention by targeting angiogenesis: A. Albini, et al.; Nat. Rev. Clin. Oncol. **9,** 498 (2012) • Angiogenesis in cancer – general pathways and their therapeutic implications; I. Dimova, et al.; JBUON **19,** 15 (2014)

PRODUCT NAME	PID	INHIBITION
AG-13958	SYN-1004	VEGF
AMG-Tie2-1	SYN-1008	Tie-2
Axitinib	SYN-1014	VEGFR1-3
BAY 43-9006 [Sorafenib]	AG-CR1-0025	VEGFR2
BMS-2	SYN-1022	VEGFR2
BMS-540215	SYN-1134	VEGFR2
Brivanib alaninate	SYN-1135	VEGFR2
Cabozantinib	SYN-1138	VEGFR2
CYC116	SYN-1034	VEGFR2
E-7080	SYN-1038	VEGFR2/3
Foretinib	SYN-1129	VEGFR2
JNJ-38158471	SYN-1133	VEGFR2
Imatinib mesylate	SYN-1046	PDGFR

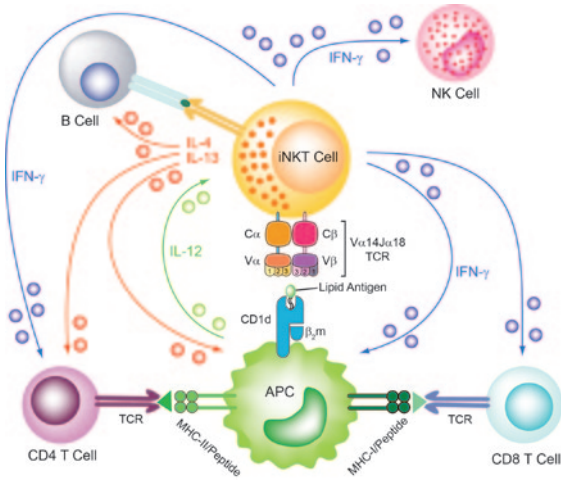
PRODUCT NAME	PID	INHIBITION
Ki20227	SYN-1049	VEGFR2 | PDGFRβ
Pazopanib . HCl	SYN-1058A	VEGFR1-3 | PDGFR
PD-0173074	SYN-1176	FGFR1
Ponatinib	SYN-1116	PDGFRα | VEGFR2 | FGFR1
Regorafenib	AG-CR1-3623	VEGFR1-3 | PDGFR
Salinosporamide A	AG-CN2-0444	VEGF
SAR-131675	SYN-1165	VEGFR3
SU-5402	SYN-1084	VEGFR2 | FGFR1
SU-6668	SYN-1085	PDGFR | VEGF | FGFR
Sunitinib malate	SYN-1086	PDGFRβ | VEGFR2
Suramin . 6Na	AG-CR1-3575	VEGF
Takeda-6d	SYN-1168	VEGFR2
Tivozanib	SYN-1013	VEGFR1-3
Vandetanib	SYN-1090	VEGFR | EGFR

Other Angiogenesis Inhibitors

Ageladine A | Alsterpaullone | BAY 43-9006 | Beauvericin | bpV(phen) | Borrelidin | Ciglitazone | Curcumin | (-)-Epigallocatechin gallate | 17-DMAG | Eupatilin | FK-866 | Fumagillin | Genistein | GW1929 | MS-275 | PLX4720 | Psammaplin A | Pseudolaric acid B | Streptochlorin | Terrein | Thapsigargin | Wortmannin | YC-1



CD1d Ligands – Potent iNKT Stimulators

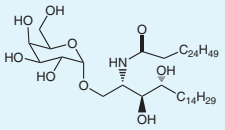


Invariant natural killer T (iNKT) cells are a subset of innate-like lymphocytes that express a characteristic antigen receptor that includes an invariant TCR-α chain and recognize glycolipid antigens bound by the major histocompatibility complex (MHC)-class-I-related protein CD1d. iNKT cells are activated early during a variety of infections and inflammatory diseases and contribute to the subsequent development of adaptive immune responses. Consequently, iNKT cells play a critical role in the development and resolution of inflammatory diseases and represent attractive targets for the development of immunotherapies. In cancer, iNKT cells were attributed a role in immunosurveillance and act as potent activators of antitumor immunity when stimulated with a synthetic agonists.

THE SOURCE

α-Galactosylceramide [KRN7000]
AG-CN2-0013 — 250 µg | 1 mg

Formula: $C_{50}H_{99}NO_9$
MW: 858.3
CAS: 158021-47-7
Source: *Synthetic*



α-GalCer Analog I [KBC-007]
AG-CR1-3608 — 100 µg
LIT: D.J. Baek, et al.; Chem. Asian J. **5,** 1560 (2010)

α-GalCer analog 8
AG-CR1-3622 — 500 µg
LIT: T. Lee, et al.; J. Med. Chem. **50,** 585 (2007)

OCH (Truncated analog of α-GalCer)
AG-CR1-3593 — 250 µg | 1mg

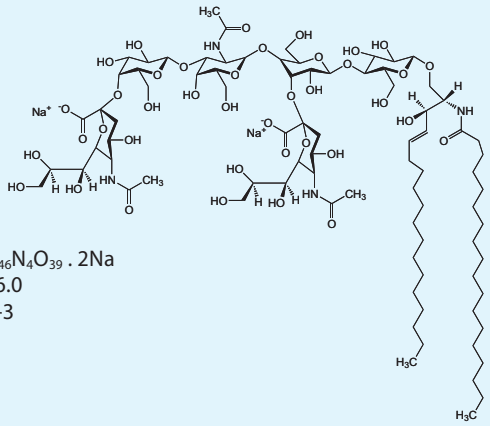
α-Mannosylceramide
AG-CR1-3594 — 250 µg | 1mg

β-Mannosylceramide
AG-CR1-3621 — 250 µg | 1mg

THE SOURCE

Gangliosides

Ganglioside GD1a . disodium salt
AG-CN2-9003 — 1 mg | 5 mg



Formula: $C_{84}H_{146}N_4O_{39}$. 2Na
MW: 1836.1 . 46.0
CAS: 12707-58-3

Ganglioside GM1 . Na
AG-CN2-9000 — 1 mg | 5 mg | 10 mg

Ganglioside GM3 . Na
AG-CN2-9002 — 1 mg

Ganglioside GT1b . 3Na
AG-CN2-9006 — 1 mg | 5 mg

Ganglioside GQ1b . 4Na
AG-CN2-9007 — 100 µg | 500 µg

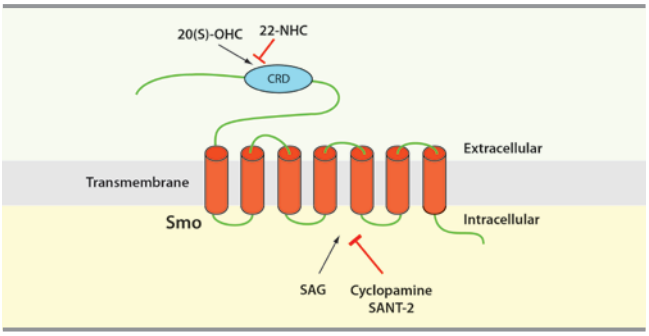
Asialo-Ganglioside GM1
AG-CN2-9008 — 500 µg | 1 mg

Also available:
Gangliosides GM2, GD3, Asialo-GM2, GD1b

Sonic Hedgehog Modulators

The Hedgehog (Hh) signaling pathway plays key roles in embryonic development, formation and maintenance of cancer stem cells (CSCs) and acquisition of epithelial-to-mesenchymal transition (EMT). Since CSCs and EMT are important biological factors responsible for cancer cell invasion, metastasis, drug resistance and tumor recurrence, inhibiton of the Hh signaling pathway is believed to be an important target for cancer therapy. Recently, several small-molecule inhibitors of Hh signaling were developed and synthesized for cancer treatment.

REVIEW: Targeting the Hedgehog signaling pathway for cancer therapy: Y. Li, et al.; Expert Opin. Ther. Targets. **16,** 49 (2012)



THE STANDARDS

GANT61
AG-CR1-3561 — 1 mg | 5 mg

Cyclopamine (Cell permeable Smo inhibitor)
AG-CN2-0028 — 1 mg | 5 mg

SANT-2 (Cell permeable Smo antagonist)
AG-CR1-3514 — 1 mg | 5 mg

Curcumin (high purity) (Downregulates Shh & Gli1)
AG-CN2-0059 — 10 mg | 50 mg | 250 mg

IHR-1 (Smo antagonist) NEW
AG-CR1-3526 — 1 mg | 5 mg

IHR-Nac (Smo antagonist) NEW
AG-CR1-3527 — 1 mg | 5 mg

22-NHC . HCl (Hh inhibitor)
AG-CR1-3523 — 1 mg | 5 mg

22-NHC inactive (Hh inhibitor control compound)
AG-CR1-3524 — 1 mg | 5 mg

Resveratrol (Gli1 mRNA expression inhibitor) BULK
AG-CN2-0033 — 50 mg | 100 mg | 500 mg

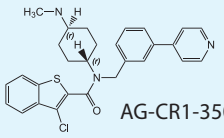
Robotnikinin (Shh signaling modulator)
AG-CR1-0069 — 1 mg

THE SOURCE

SAG – Potent Shh Agonist

LIT: Potent small molecule Hedgehog agonists induce VEGF expression in vitro: K. Seifert, et al.; Bioorg. Med. Chem. **20,** 6465 (2012)

SAG AG-CR1-3506
SAG . 2HCl (water soluble) AG-CR1-3585
SAG Analog (LowTox) AG-CR1-3517
SAG Analog (highly active) AG-CR1-3518



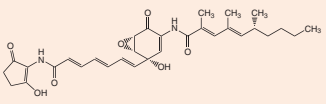
AG-CR1-3506

Farnesyltransferase Inhibitors

BULK

Manumycin A
BVT-0091 — 1 mg | 5 mg | 10 mg

Formula: $C_{31}H_{38}N_2O_7$
MW: 550.6
CAS: 52665-74-4
Source: *Streptomyces parvulus*



Potent, selective and competitive cell permeable rasfarnesyltransferase inhibitor.

Also available:
Andrastin A | Manumycin B | Palmarumycin C3

Ubiquitin Related Inhibitors

proTAME Solution (APC/C Ub ligase inhibitor)
AG-CS1-0100 — 1 mg

MLN4924 Solution (Nedd8 E1 activating enzyme inhibitor)
AG-CS1-0103 — 1 mg

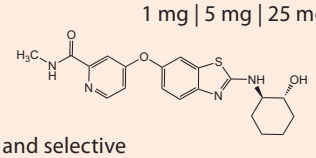
Apcin (APC/C Ub ligase inhibitor)
AG-CR1-3603 — 5 mg

Selected Anticancer Small Molecules from the Bench

BULK

BLZ-945

AG-CR1-3609 — 1 mg | 5 mg | 25 mg



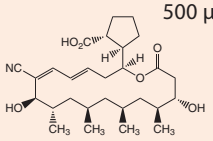
Formula: $C_{20}H_{22}N_4O_3S$
MW: 398.5
CAS 953769-46-5

Anticancer compound. Potent and selective colony stimulating factor 1 receptor (CSF-1R; c-Fms) inhibitor.

BULK

Borrelidin

BVT-0098 — 500 µg | 1 mg | 5 mg



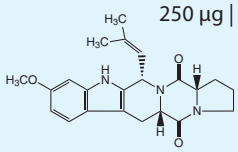
Formula: $C_{28}H_{43}NO_6$
MW: 489.6
CAS: 7184-60-3
Source: *Streptomyces* sp.

Bacterial, protozoan and mammalian threonyl-tRNA synthetase (THrRS) inhibitor. Antiangiogenic (IC_{50} = 0.8 nM) and anticancer agent.

THE SOURCE

Fumitremorgin C

BVT-0189 — 250 µg | 1 mg



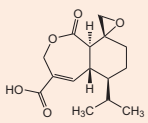
Formula: $C_{22}H_{25}N_3O_3$
MW: 379.5
CAS: 118974-02-0
Source: *Aspergillus fumigatus*

Mycotoxin. Potent and specific inhibitor of the breast cancer resistance protein (BCRP; ABCG2).

UNIQUE

Heptelidic acid

AG-CN2-0118 — 250 µg | 1 mg



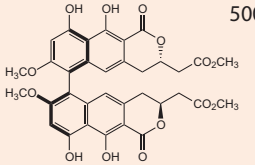
Formula: $C_{15}H_{20}O_5$
MW: 280.3
CAS: 74310-84-2
Source: *Trichoderma* sp.

Potent selective GAPDH inhibitor. Selectively kills high-glycolytic cancer cells through glucose-dependent active ATP deprivation.

UNIQUE

(-)-Viriditoxin

AG-CN2-0471 — 500 µg



Formula: $C_{34}H_{30}O_{14}$
MW: 662.6
CAS: 1381782-08-6
Source: *Aspergillus* sp.

Bacterial cell division protein FtsZ inhibitor. Apoptosis and autophagy regulator.

Altersolanol A (Anticancer compound)
AG-CN2-0436 — 1 mg

Avarol (Anticancer compound)
AG-CN2-0044 — 1 mg

Asperphenamate (Anticancer compound)
AG-CN2-0171 — 250 µg| 1 mg

Averantin (Antitumor compound)
BVT-0169 — 1 mg | 5 mg

Becatecarin (Topo II inhibitor)
BVT-0258 — 250 µg| 1 mg

Bikaverin (Anticancer compound)
AG-CN2-0130 — 250 µg | 1 mg

BQ-788 . Na (Potent ETBR antagonist)
AG-CP3-0012 — 500 µg| 1 mg

Decoyinine (GMP synthetase inhibitor)
BVT-0030 — 1 mg

2,5-Dimethyl-celecoxib (Apoptosis inducer)
AG-CR1-3599 — 5 mg | 25 mg

Elaiophylin (Autophagy inhibitor and Apoptosis inducer)
BVT-0185 — 1 mg | 5 mg

Etoposide (DNA topoisomerase II inhibitor)
AG-CR1-3572 — 25 mg | 100 mg | 5 x 100 mg

Funalenone (MMP-1 inhibitor)
AG-CN2-0137 — 1 mg

Harzianum A (Anticancer compound)
AG-CN2-0117 — 250 µg | 1 mg

Neoxaline (Cell cycle inhibitor at G2/M phase)
AG-CN2-0154 — 1 mg | 5 mg

OM173-αA (DNMT3B inhibitor)
AG-CN2-0158 — 1 mg | 5 mg

Ophiobolin A (Calmodulin antagonist)
AG-CN2-0431 — 100 µg| 1 mg

PD 150,606 (Calpain-1/-2 inhibitor)
AG-CR1-0066 — 5 mg | 25 mg

Piperlongumine (Apoptosis/Necrosis inhibitor)
AG-CN2-0024 — 10 mg | 50 mg

PJ-34 (Potent PARP inhibitor)
AG-CR1-0100 — 1 mg | 5 mg | 25 mg

Pyridoxatin (MMP-2 inhibitor)
AG-CN2-0123 — 250 µg | 1 mg

Trypacidin (Necrosis inhibitor)
BVT-0442 — 1 mg | 5 mg

Zerumbone (Potent antitumor compound)
AG-CN2-0004 — 10 mg | 50 mg

HDAC & HAT Inhibitors

For HDAC6 Inhibitors see backcover

Apicidin (HDAC inhibitor)
AG-CN2-0087 — 1 mg | 5 mg

Butyrolactone 3 (Specific Gcn5 inhibitor)
AG-CR1-3522 — 2 mg

C646 (p300/CBP HAT inhibitor)
AG-CR1-3508 — 1 mg | 5 mg

Dihydrochlamydocin (HDAC inhibitor)
AG-CN2-0115 — 250 µg | 1 mg

5-Hydroxymethylcytosine (Epigenetic marker) NEW
BVT-0229 — 10 mg

MS-275 (HDAC1 inhibitor)
AG-CR1-0032 — 1 mg | 5 mg | 25 mg

Psammaplin A (Class I HDAC inhibitor)
AG-CN2-0088 — 100 µg | 500 µg

Splitomicin (Yeast HDAC Sir2p inhibitor)
AG-CR1-0088 — 1 mg | 5 mg | 25 mg

Trichostatin A (HDAC inhibitor)
AG-CN2-0108 — 1 mg | 5 mg

Vorinostat [SAHA] (HDAC inhibitor)
SYN-3006 — 5 mg | 10 mg | 50 mg | 100 mg

pan-Caspase Inhibitors

Q-VD-OPh (pan-Caspase inhibitor)
AG-CP3-0006 — 1 mg | 3 x 1 mg | 5 mg
For Negative Control see Q-VE-OPh (AG-CP3-0007)

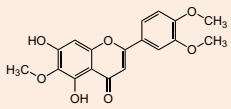
Z-VAD-FMK (cell permeable)
(pan-Caspase inhibitor) BULK
AG-CP3-0002 — 1 mg | 5 mg

Selected Antioxidants, ROS, NO and H_2S Reagents

BULK

Eupatilin
AG-CN2-0432 — 5 mg | 25 mg

Formula: $C_{18}H_{16}O_7$
MW: 344.3
CAS: 22368-21-4
Source: *Artemisia* sp.

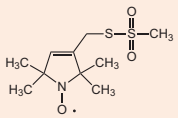


Selective inhibitor of 5-lipoxygenase. PI3K Class I, MKK3/6 and MKK4 inhibitor. Antioxidant, antidiabetic, anticancer, anti-inflammatory and immunosuppressive compound.

BULK

MTSSL
AG-CR1-3573 — 10 mg | 50 mg

Formula: $C_{10}H_{18}NO_3S_2$
MW: 264.3
CAS: 81213-52-7



Highly reactive, thiol-specific spin-label. Used to label cysteine residues in proteins (site-directed labeling, SDS-labeling).

Auranofin (5-Lipoxygenase inhibitor)
AG-CR1-3611 — 25 mg | 100 mg

7-Azido-4-methylcoumarin (H_2S probe)
AG-CR1-3525 — 1 mg | 5 mg

Bradykinin (eNOS/NOSIII activator)
AG-CP3-0025 — 5 mg | 25 mg

Cinnamtannin B-1 (Potent antioxidant)
AG-CN2-0428 — 5 mg

COX-2 Inhibitor 8c
AG-CR1-3606 — 1 mg

DETA NONOate (NO donor)
AG-CR1-3614 — 5 mg | 25 mg

DMNQ (ROS inducer)
AG-CR1-3598 — 5 mg | 10 mg | 25 mg

H2S Donor 5a
AG-CR1-3510 — 5 mg | 25 mg

Luteolin (Potent free radical scavenger)
AG-CN2-0098 — 5 mg | 25 mg

THE STANDARDS

iNOS Modulators

1400W (Selective iNOS/NOSII inhibitor)
AG-CR1-0018 — 5 mg | 25 mg | 100 mg

Xanthorrhizol (Potent COX-2 & iNOS/NOSII inhibitor)
AG-CN2-0090 — 1 mg

Receptor Agonists and Antagonists

PRODUCT NAME	ACTIVITY	PID	SIZE
Amauromine	CB1 receptor antagonist	AG-CN2-0113	250 µg | 1 mg
epi-Aszonalenin A	Substance P inhibitor	AG-CN2-0163	1 mg | 5 mg
Bilobalide	GABA(A) receptor antagonist	AG-CN2-0026	10 mg | 50 mg
Chaetoviridin A	Monoamine oxidase inhibitor	BVT-0419	1 mg | 5 mg
Cyclopenin	AChE inhibitor	AG-CN2-0134	1 mg | 5 mg
Debromohymenialdisine	Potential anti-Alzheimer's agent	AG-CN2-0068	100 µg
EM574 [Motilide]	Motilin receptor agonist	AG-CN2-0102	250 µg | 1 mg
Finasteride	GABA activity enhancer	AG-CR1-3589	25 mg | 100 mg | 500 mg
Fulvic acid	Tau and Aβ aggregation inhibitor	AG-CN2-0135	1 mg | 5 mg
Hyperforin . DCHA	TRPC6 channel activator	AG-CN2-0008	500 µg | 1 mg
20-Hydroxyecdysone	GABA(A) receptor modulator	AG-CN2-0072	5 mg | 10 mg | 50 mg
Ionomycin (free acid)	Potent Ca^{2+} ionophore	AG-CN2-0416	1 mg | 5 mg
Luteolin	Monoamine transporter activator	AG-CN2-0098	5 mg | 25 mg
MTEP	Potent mGluR5 antagonist	AG-CR1-0022	5 mg | 25 mg
NG 012	NGF potentiator	AG-CN2-0155	1 mg | 5 mg
Papaverine . HCl	PDE10A inhibitor	AG-CN2-0414	1 g | 5 g
Pseurotin D	Neuroleptic agent	BVT-0426	1 mg | 5 mg
Pimprinine	Monoamine oxidase inhibitor	BVT-0297	1 mg | 5 mg
Quinolactacin A	AChE inhibitor	AG-CN2-0164	1 mg | 5 mg
Territrem B	AChE inhibitor	AG-CN2-0142	500 µg | 1 mg
Thiocolchicoside	GABA(A) receptor antagonist	AG-CN2-0076	1 mg | 5 mg | 25 mg
Sceptrin . 2HCl	mAChR Inhibitor	AG-CN2-0440	500 µg
SNC80	δ-Opioid receptor agonist	AG-CR1-0017	5 mg | 25 mg
SB366791	Potent TRPV1 antagonist	AG-CR1-0034	5 mg | 25 mg
Umbellulone	Selective TRPA1 activator	AG-CN2-0085	10 mg
URMC-099	MLK-3 inhibitor	SYN-1211	1 mg | 5 mg | 10 mg | 50 mg

Key Constituents of *Hypericum perforatum*

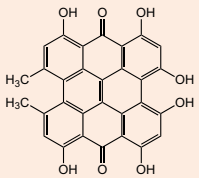
BULK

Hypericin

AG-CN2-0449 — 1 mg | 5 mg | 10 mg

Formula: $C_{30}H_{16}O_8$
MW: 504.5
CAS: 548-04-9

Photosensitive pigment/chromophore with bright red fluorescence emission (λmax: 594nm). Antiviral, anticancer and antidepressant agent.



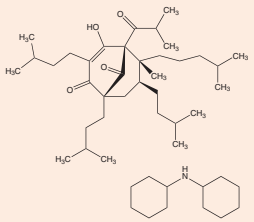
BULK

Hyperforin . DCHA

AG-CN2-0008 — 500 µg | 1 mg

Formula: $C_{35}H_{51}O_4$. $C_{12}H_{24}N$
MW: 535.8 . 182.3
CAS: 238074-03-8

Anti-depressant, anti-Alzheimer's, anti-malarial, anti-inflammatory, anticancer and anti-angiogenic compound. Specific activator of TRPC6 channels. Potent SIRT1 and SIRT2 inhibitor.



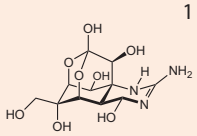
Neurotoxins

BULK

Tetrodotoxin

AG-CN2-0452 (free base) 1 mg
AG-CN2-0450 (citrate, water soluble) 1 mg

Formula: $C_{11}H_{17}N_3O_8$
MW: 319.3
CAS: 4368-28-9 (citrate free)
Source: *Tetraodontidae*



Potent neurotoxin. Selective, reversible excitable voltage-gated sodium channel (VGSC) blocker.

Convulxin (GPVI Receptor agonist)

AG-CN2-0465 50 µg

Roquefortine C (Potent neurotoxin)

AG-CN2-0002 1 mg
BVT -0425 500 µg | 1 mg

Verruculogen (Neurotoxin)

BVT -0443 1 mg | 5 mg

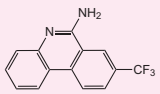
Lead Compounds for Neurodegenerative Diseases

Anti-Prion Agents – Protein Aggregation Inhibitors

6-Amino-8-trifluoromethylphenanthridine

MR-C0031 1 mg | 5 mg | 25 mg

Formula: $C_{14}H_9F_3N_2$
MW: 262.2
CAS: 651055-83-3



6-Aminophenanthridine

MR-C0029 1 mg | 5 mg | 25 mg

Chloroguanabenz acetate

MR-C0036 1 mg | 5 mg

Selective N- & P/Q-type Ca^{2+} Channel Agonist

GV-58

MR-C0035 1 mg | 5 mg

Anti-Alzheimer's Disease (AD) Agent

Leucettine L41

MR-C0023 1 mg | 5 mg | 25 mg

Alzheimer's Disease (AD) Accelerator

Aftin-4

MR-C0014 1 mg | 5 mg | 25 mg

Aftin-5

MR-C0015 1 mg | 5 mg | 25 mg

THE SOURCE BULK

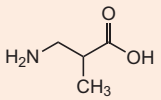
Model Compound for Sensory Studies

Pellitorine

AG-CN2-0009 1 mg | 5 mg

Formula: $C_{14}H_{25}NO$
MW: 223.4
CAS: 18836-52-7 **Source:** *Synthetic*

Tingling-inducing agent. Excellent stable model compound for sensory studies. Exerts same profile as the unstable compound hydroxy-α-sanshool.



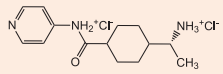
ROCK Inhibitors & Stem Cell Modulators

Human embryonic stem cells (hESCs) and human induced pluripotent stem cells (hiPSCs) promise new avenues for medical innovation. These human cells share many similarities with mouse counterparts, including pluripotency and they exhibit several unique properties. A technical problem for various cellular manipulations is the phenomenon of dissociation-induced apoptosis, which is unique to human pluripotent stem cells. This apoptosis is suppressed by ROCK inhibitors and brought a revolutionary change to this troublesome situation.

REVIEW: Lonely death dance of human pluripotent stem cells: ROCKing between metastable cell states: M. Ohgushi & Y. Sasai; Trends Cell Biol. **21,** 274 (2011)

Y-27632 . 2HCl
AG-CR1-3564 — 1 mg | 5 mg | 25 mg

Formula: $C_{14}H_{21}N_3O$. 2HCl
MW: 247.3 . 73.0
CAS: 129830-38-2



Enhances the survival and cloning efficiency of dissociated human embryonic stem (hES) cells without affecting their pluripotency. Increases survival rate of hES cells undergoing cryopreservation. Prevents apoptosis.

Other Selected Inhibitors

Apicidin (Promotes differentiation of ES cells)
AG-CN2-0087 — 1 mg | 5 mg

BIX 01294 (free base) (Stem cell inducer) BULK
AG-CR1-0051 — 1 mg | 5 mg | 25 mg

GSK429286A (Potent ROCK-I inhibitor)
SYN-1071 — 1 mg | 5 mg | 10 mg | 50 mg | 100 mg

IWR-1-endo (Wnt pathway signaling inhibitor)
AG-CR1-3581 — 5 mg | 25 mg

MS-275 (Promotes differentiation of ES cells)
AG-CR1-0032 — 1 mg | 5 mg | 25 mg

Pifithrin-α . HBr (p53 inhibitor)
AG-CR1-0004 — 5 mg | 10 mg | 25 mg

NU6102 (Potent CDK1/CDK2 inhibitor/ROCK-II inhibitor)
AG-CR1-0020 — 1 mg | 5 mg

Shz-1 (Enhancer of regenerative repair)
AG-CR1-3502 — 1 mg | 5 mg

SR3677 (Potent ROCK-II and ROCK-I inhibitor)
SYN-1083 — 1 mg | 5 mg | 10 mg | 50 mg | 100 mg

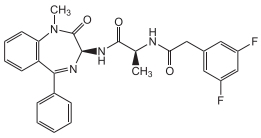
Trichostatin A (Promotes differentiation of ES cells)
AG-CN2-0108 — 1 mg | 5 mg

LATEST REVIEW: Rho Kinase (ROCK) inhibitors and their therapeutic potential: Y. Feng, et al.; J. Med. Chem. **(Epub ahead of print)** (2015)

Notch Processing Inhibitors

Compound E
AG-CR1-0081 — 250 µg | 1 mg | 5 mg

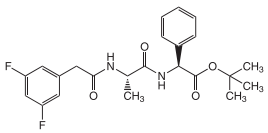
Formula: $C_{27}H_{24}F_2N_4O_3$
MW: 490.5
CAS: 209986-17-4



Non-competitive γ-secretase inhibitor.
Notch processing inhibitor.

DAPT
AG-CR1-0016 — 5 mg | 25 mg

Formula: $C_{23}H_{26}F_2N_2O_4$
MW: 432.5
CAS: 208255-80-5



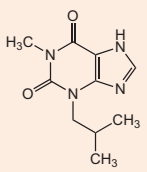
Cell permeable γ-secretase inhibitor.
Notch processing inhibitor.

BULK

High Purity IBMX
Enhances Differentiation of 3T3-L1 Cells

IBMX
AG-CR1-3512 — 500 mg | 1 g

Formula: $C_{10}H_{14}N_4O_2$
MW: 222.3
CAS: 28822-58-4



COMMODITIES out of the Box

BULK from Original Source

High Purity Detergents	**MEGA-8 | n-Octyl-β-D-thioglucopyranoside | n-Dodecyl-α-D-maltoside | n-Dodecyl-β-D-maltoside**
Protease Inhibitors	**AEBSF | Amastatin | Antipain | Leupeptin | Paptstatin**
HSP90 Inhibitors	**Geldanamycin | 17-AAG | 17-DMAG**
Gene Cloning Tools	**IPTG (animal-free, dioxane-free) | X-Gal**
Cell Selective Agents	**G418 . sulfate | Puromycin**
AC & sGC Activators	**Forskolin | YC-1**
Tumor Promoters	**Phorbol 12-myristate 13-acetate [TPA/PMA] | Thapsigargin**
Staurosporine & Analogs	**Staurosporine | K-252a | K-252c**
Ecdysteroid Agonists Gene Expression Inducer	**Ponasterone A | Muristerone A | Makisterone A | Ecdysone | 20-Hydroxyecdysone | Halofenozide | Methoxyfenozide**
HIF Inhibitors	**Chetomin | Echinomycin**
Bile Acid Nuclear Receptor Modulators	**6-ECDCA | Chenodeoxycholic acid | Ursodeoxycholic acid | Stigmasterol**
Potent Platinum-based Antineoplastic Agents	**Carboplatin | Cisplatin | Oxaliplatin**

Other Products

Thaxtomin A (Plant cell necrosis inducer)
BVT-0206 1 mg | 5 mg

Actinomycin D (RNA synthesis inhibitor)
BVT-0089 5 mg | 25 mg | 100 mg

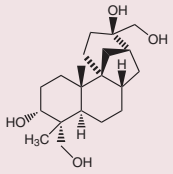
4-Aminophenylphosphate . Na
AG-CR1-3586 10 mg | 50 mg | 100 mg

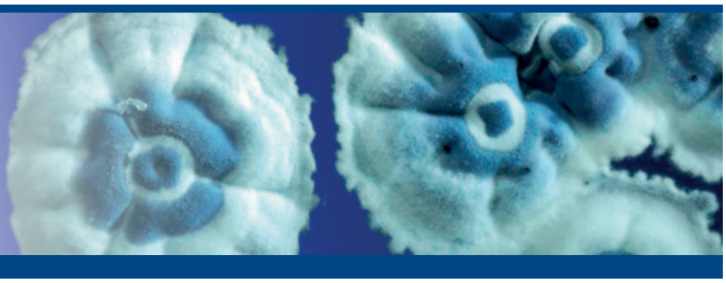
(+)-Brefeldin A (Protein transport inhibitor)
AG-CN2-0018 5 mg | 10 mg | 25 mg

(+)-Aphidicolin
BVT-0307 1 mg | 5 mg | 25 mg

Formula: $C_{20}H_{34}O_4$
MW: 338.5
CAS: 38966-21-1
Source: *Phoma* sp. BS 7210

Antiviral and antineoplastic agent. Specific DNA polymerase α and δ inhibitor in eukaryotic cells and in some viruses of animal origin.





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JC-10 (high purity)
MITOCHONDRIA

AG-CR1-3600
1 mg | 5 mg

Shows improved solubility compared to JC-1 in aqueous media. Useful for determining MMP in cells by flow cytometry, fluorescence microscopy and in microplate-based fluorescent assays. Accumulates in mitochondria of cells with a polarized mitochondrial membrane. Generates an orange J-aggregate emission profile (λex = 540 nm/λem = 590 nm) in healthy cells and a shift to green emission (λex = 490 nm/λem = 525 nm) in injured or dead cells.

Wavelength Maxima: λex = 510 nm | λem = 525 nm.

Also available: **JC-1 iodide (AG-CR1- 3568)**

LysoGlow84™
ACIDIC ORGANELLES

AG-CMA-1005
1 mg

Cell/membrane permeable, non-toxic, pH-sensitive fluorescent dye (blue-green range) for live imaging of pH alteration in acidic organelles, lysosomes, autophagolysosomes, vesicles, cells, tissue and even small, transparent whole animals without side effects. Useful as intracellular pH indicator with a wide range of fluorescence (pH 3 to pH 13).

Wavelength *Maxima:*
λex = 320 nm | λem = 440nm (pH3-6) and 400nm (pH 8 -13)

Also available: **Ageladine A . TFA (AG-CMA-1001)**

NEW

Potent & Selective HDAC6 Inhibitors

HDAC6 deacetylates tubulin, Hsp90 and the core histones (H2A, H2B, H3, H4). Histone deacetylases act via the formation of large multiprotein complexes. HDAC6 plays an important role in microtubule-dependent cell motility, transcriptional regulation, degradation of misfolded proteins and cell cycle and is involved in autophagy, inflammation, cancer and neurodegeneration.

PRODUCT NAME	PID	SIZE	HDAC6 INHIBITION	SELECTIVITY TOWARDS OTHER HDACS
Tubastatin A [TubA]	AG-CR1-3900	1 mg | 5 mg	IC_{50}=15nM	Other HDACs (IC_{50}= >15μM), HDAC8 (IC_{50}=0.9μM)
Nexturastat A	AG-CR1-3901	1 mg | 5 mg	IC_{50}=5.02nM	Other HDACs (IC_{50}=3-10μM)
Nexturastat B	AG-CR1-3902	1 mg | 5 mg	IC_{50}=3nM	HDAC1 (IC_{50}=0.9μM)
ACY-775	AG-CR1-3903	1 mg | 5 mg	IC_{50}=7.5nM	HDAC1-9 (IC_{50}=1-10μM)
DMAPB	AG-CR1-3904	1 mg | 5 mg	IC_{50}=114nM	Other HDACs (IC_{50}=1-8μM)
PMPH	AG-CR1-3905	1 mg | 5 mg	IC_{50}=11nM	HDAC1 (IC_{50}=1.5μM)
DABPH	AG-CR1-3906	1 mg | 5 mg	IC_{50}=12nM	HDAC1 (IC_{50}=6.8μM)
MBIMPH	AG-CR1-3907	1 mg | 5 mg	IC_{50}=9nM	Other HDACs (IC_{50}=0.1-12μM)
MBIMPH F-Analog 1 . HCl	AG-CR1-3908	1 mg | 5 mg	IC_{50}=3nM	Other HDACs (IC_{50}=0.03-20μM)
MBIMPH F-Analog 2	AG-CR1-3909	1 mg | 5 mg	IC_{50}=5nM	Other HDACs (IC_{50}=0.2-11μM)

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