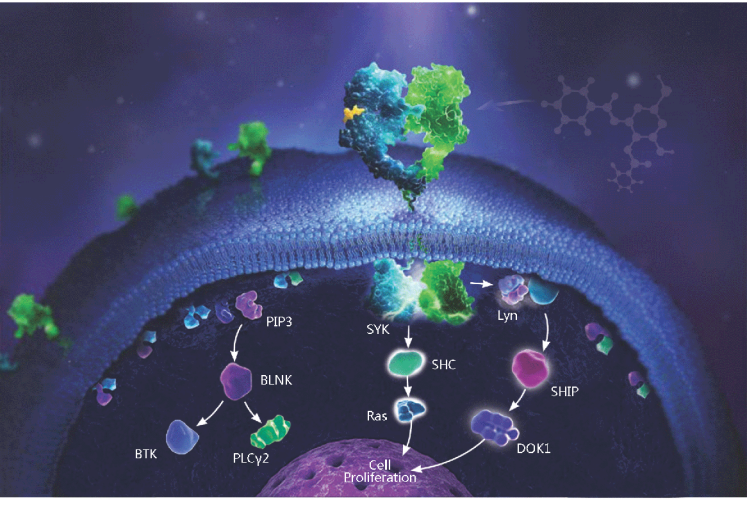
Product Catalog

2016-2017

APExBIO
An Apoptosis and Epigenetics Company



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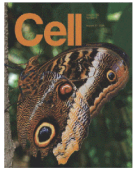
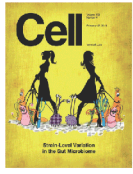
Small Molecule Compounds
Big Biomedical Research

Publications Citing ApexBio Products

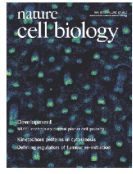
2015;524(7565):309-14



2015;162(5):987-1002



2015,160(4):729-744



2015 May;17(5):627-38

2015;18(10):1464-73

2015 Jun 24;6:7515

2015;211(1):159-72

2015;210(3):435-50

2015;112(26):E3365-73

2015;112(30):9412-7

2014,111(26):9503-8

2015 May 19;4

2014 Dec 30;3e:04265

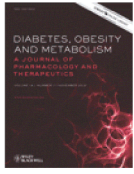
2015 Sep;16(9):1114-30

2015;12(12):1986-96

2016 Jan; 23(1):76-88

Publications Citing ApexBio Products

2015;11(12)e1005324



2015,17(4):403-413

2014,5(11):3728-42

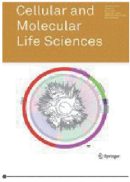
2015;6(2):1171-89

2015;35(38):13244-56

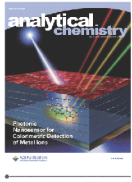
2014,7(357):ra122

2015;23(9)1475-85

2015;106(1):153-62



2015;72(22)4399-407



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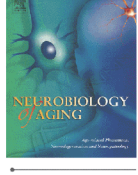
2015,359(2):250-258

2015 Mar 9;5:8895

2015 Jul 13;5:11529

2015;128(5):1034-50



2015,36(3):1462-1470

2016;196(1):407-15

/ Contents /

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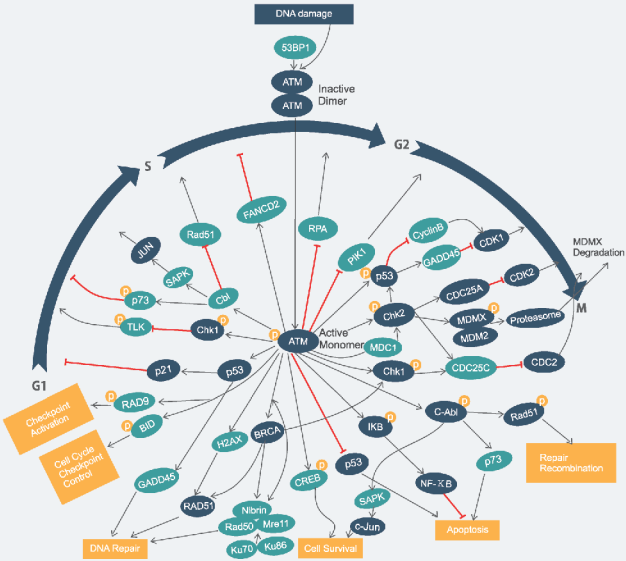
/ Abbreviations /

Aβ: Amyloid beta
Abl: Ableson tyrosine kinase
AhR: Aryl hydrocarbon receptor
Akt: Also known as protein kinase B (PKB)
ALK: Anaplastic lymphoma kinase
AMPK: AMP-activated protein kinase
AP-1: Transcription factor
ATM: Ataxia telangiectasia-mutated
ATR: Ataxia telangiectasia and Rad3-related
AXL: Receptor tyrosine kinase
BAFFs: B cell activating factor belonging to the TNF family
Bax: Bcl-2 associated X protein
Bcl-2: B cell lymphoma 2
Bcl-xL: B cell lymphoma-extra large
BMI1: Also called polycomb group RING finger protein 4 (PCGF4)
BTK: Bruton's tyrosine kinase
c-Abl: Abelson murine leukemia viral oncogene
CaMK: Ca^{2+}/calmodulin-dependentprotein kinase
CDC42: Control protein 42 homolog
CDK: Cyclin-dependent kinase
CETP: Cholesteryl ester transfer protein
CFTR: Cystic fibrosis transmembrane conductance regulator
Chk: Csk homologous kinase
CK1: Keratin 1
cIAP: Cellular inhibitor of apoptosis
cPLA2: Cytosolic phospholipases A2
c-Met: Also called HGFR (hepatocyte growth factor receptor)
c-Myc: Oncogenic transcription factor
COT: Center-of-Tree
COX: Cyclooxygenase
CREB: cAMP-response element binding protein
Cyto C: Cytochrome c
DHFR: Dihydrofolate reductase
DNA-PK: DNA-dependent protein kinase
DNMT: DNA methyltransferase
DPP4: Dipeptidyl peptidase-4
DUB: Deubiquitylase
EEF-2: Eukaryotic elongation factor 2
EGFR: Epidermal growth factor receptor
EGF: Epidermal growth factor
EIF4E: Translation initiation factor 4E
ERK: Extracellular signal-regulated kinases
EZH2: Enhancer of zeste homolog 2
E1: Ubiquitin-activating enzyme
FAK: Focal adhesion kinase
FAS: Fatty acid synthase
FasL: FAS ligand
FGF: Fibroblast growth factors
FGFR: Fibroblast growth factor receptor
FLT3: FMS-like tyrosine kinase 3 receptor
FXR: Farnesoid X receptor
GPCR: G protein–coupled receptors
GSK3: Glycogen synthase kinase 3
HDAC: Histone deacetylases
HIF-1α: Hypoxia-inducible factor-1α
HSP: Heat shock protein
IFN: Interferon
IGFs: Insulin-like growth factors
IKK: IκB Kinase
IKKβ: IκB kinase-β
IL-1β: Interleukin-1 beta
Insulin/IGF: Insulin-like growth factor
JAK: Janus kinase
JNK: C-Jun N-terminal kinases
LTB4: Leukotriene B4
MDM2: Mouse double minute 2
MDMX: Also called Mdm4
Mcl-1: Myeloid cell leukemia 1
MyD88: Myeloid differentiation primary response gene 88
MEK1/2: Mitogen-activated protein kinase kinase 1/2

/ Abbreviations /

mTOR: Mammalian target of rapamycin
MTH1: MutT homologue 1
MMP: Massively multi-player
NF-κB: Nuclear factor kappa B
NFAT: Nuclear factor of activated T-cells
NMDA: N-Methyl-D-aspartic acid
PAK: P21-activated kinase
PARP: Poly ADP ribose polymerase
PDE: Phosphodiesterase
PDGFR: Platelet-derived growth factor receptor
PDGFs: Platelet-derived growth factors
PDK1: Phosphoinositide-dependent kinase-1
P-gp: P-glycoprotein
PIM: Serine/threonine kinase
PI3K: Phosphoinositide 3-Kinase
PKA: Protein kinase A
PKC: Protein kinase C
PKD: Protein kinase D
PLK1: Polo-like kinase 1
PLC: Phospholipase C
p53: Tumor protein p53
p38: Protein kinase p38
p300: A transcriptional coactivator
P110: An enzyme that regulates immune function
PPAR: Peroxisome proliferator-activated receptor
PP2A: Protein phosphatase 2A
PP2: Protein phosphatase 2
PP1: Protein phosphatase 1
PTEN: Phosphatase and tensin homolog
PTP: Protein tyrosine phosphatase
PYK: Pyruvate kinase
Rac: Belong to Rho-family small GTPase
Raf: rapidly accelerated fibrosarcoma
RAS: Renin-angiotensin system
RSK: Ribosomal protein S6 kinase
RTK: Receptor tyrosine kinase
ROCK: Rho-associated kinase
RXR: Retinoid X receptor
SCF: Stem cell factor
SFRP: Secreted frizzled-related protein
SHP: Small heterodimer partner
SIRT: Sirtuins
Src: Belong to tyrosine protein kinases.
STAT: Signal transducer and activator of transcription
SUV39H1: Histone methyl transferase
Syk: Spleen tyrosine kinase
TGF: Transforming Growth Factor
TLR4: Toll-like receptor 4
TNF: Tumor necrosis factor
TrkA/B: Tropomyosin receptor kinase A/B
VEGFR: Vascular endothelial growth factor receptor
VEGFs: Vascular endothelial growth factors
WIP1: Wild-type p53-induced phosphatase 1hosphatase 1
Wnt: Wingless-type MMTV integration site family
XIAP: X-linked inhibitor-of-apoptosis protein

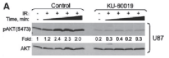
ATM Signaling Pathway



ATM Inhibitors

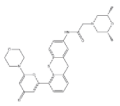
KU-60019

KU-60019 is an improved analogue of KU-55933 with IC50 of 6.3 nM for ATM, 270- and 1600-fold more selective for ATM than DNA-PK and ATR.



Treatment of KU-60019 inhibits Akt phosphorylation

A8336



Size: 10 mg, 50 mg, 200 mg.

Soluble in DMSO > 10 mM.

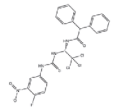
CGK733

CGK733 is a potent and selective inhibitor of ATM/ATR with IC50 of ~200 nM.

Size: 10 mg, 50 mg, 200 mg.

Soluble in DMSO > 10 mM.

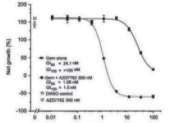
A8624



Chk1 Inhibitors

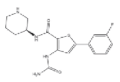
AZD7762

AZD7762 is a potent and selective inhibitor of Chk1 with IC50 of 5 nM.



AZD7762 enhances the activity of DNA damaging agents.

A5919



Size: 5 mg, 25 mg, 100 mg.

Soluble in DMSO > 10 mM.

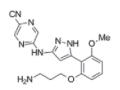
LY2606368

LY2606368 is a selective ATP competitive inhibitor of Chk1 with IC50 of 1.5 nM in SW1990 cells.

Size: 5 mg, 25 mg.

Soluble in DMSO.

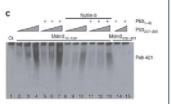
B1088



MDM2 Inhibitors and Antagonist

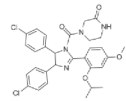
Nutlin-3

Nutlin-3 is a potent and selective antagonist of MDM2 with IC50 of 90 nM.



Binding of the C-terminal domain of p53 and the N-terminal domain of MDM2 is interrupted by the treatment of Nutlin-3.

A4228

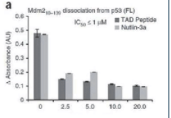


Size: 5 mg, 10 mg, 25 mg, 100 mg.

Soluble in DMSO > 10 mM.

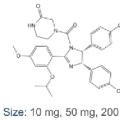
Nutlin-3a chiral

Nutlin-3a chiral is a small-molecule inhibitor of MDM2 with IC50 of 0.09 µM.



Nutlin-3a disrupts p53's interaction with the N-terminal of MDM2.

A3671

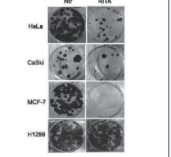


Size: 10 mg, 50 mg, 200 mg.

Soluble in DMSO > 10 mM.

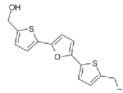
RITA (NSC 652287)

RITA (NSC 652287) is an inhibitor of MDM2-p53 interaction by targeting p53.



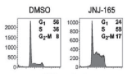
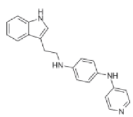
RITA suppresses cancer cell growth.

A4202

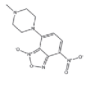


Size: 5 mg, 10 mg, 25 mg, 50 mg.

Soluble in DMSO > 10 mM.

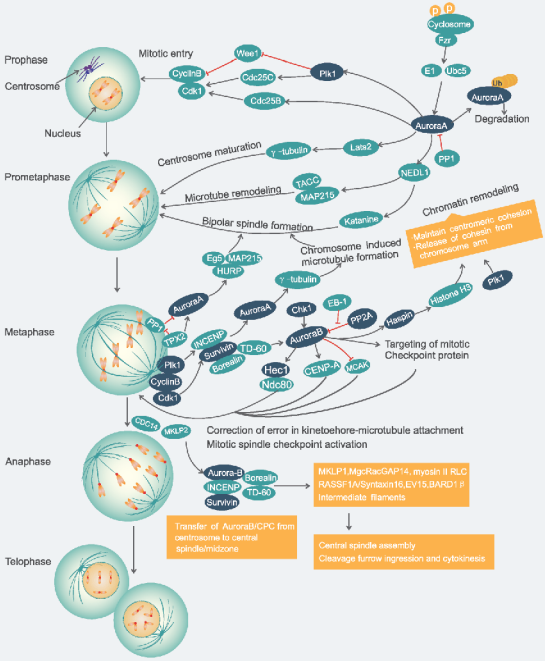
JNJ-26854165 (Serdemetan)	A4204
JNJ-26854165 (Serdemetan) is an inhibitor of MDM2 and also inducer of early apoptosis in p53 wild-type cells.  Treatment of JNJ-26854165 induced G2-M arrest.	 Size: 5 mg, 25 mg, 100 mg. Soluble in DMSO > 10 mM.

MDMX Inhibitor

NSC 207895 (XI-006)	A4209
NSC 207895 is a MDMX inhibitor and anticancer agent. Size: 5 mg, 25 mg. Limited solubility.	

For more targets information, please see our website at "http://www.apexbt.com/research-area/cell-cycle/atm-atr.html", or email us: info@apexbt.com.

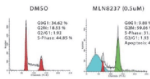
Aurora Kinase Signaling Pathway



Aurora A Inhibitors

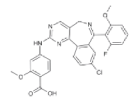
MLN8237 (Alisertib)

Alisertib (MLN8237) is a selective inhibitor of Aurora A with IC50 of 1.2 nM. It has > 200-fold higher selectivity for Aurora A than Aurora B.



MLN8237 induces G2/M arrest and apoptosis.

A4110



Size: 5 mg, 10 mg, 50 mg, 200 mg.

Soluble in DMSO > 10 mM

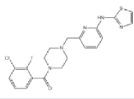
MK-8745

MK-8745 is a potent and selective inhibitor of Aurora A with IC50 of 0.6 nM.

Size: 10 mg, 50 mg.

Soluble in DMSO > 10 mM.

A8807



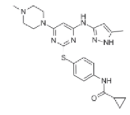
VX-680 (MK-0457,Tozasertib)

VX-680 is an inhibitor of Aurora with Ki of 0.6 nM, 4.6 nM, 18 nM, 30 nM and 30 nM for Aurora A, C, B, FLT3 and Bcr-Abl, respectively.

Size: 25 mg, 100 mg, 250 mg.

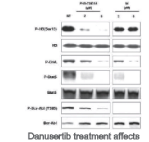
Soluble in DMSO > 10 mM.

A4111



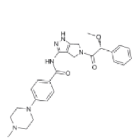
Danusertib (PHA-739358)

Danusertib (PHA-739358) is an inhibitor of Aurora kinase for Aurora A, B and C with IC50 of 13 nM, 79 nM and 61 nM, respectively. It is modestly potent to Abl, TrkA, c-RET and FGFR1, and less potent to LCK, VEGFR2/3, c-Kit, CDK2, etc.



Danusertib treatment affects phosphorylation of Bcr-Abl, CRKL, STAT5 and H3.

A4116



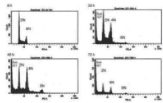
Size: 5 mg, 10 mg, 50 mg.

Soluble in DMSO > 10 mM.

Aurora B Inhibitors

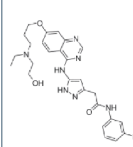
Barasertib (AZD1152-HQPA)

Barasertib (AZD1152-HQPA) is a highly selective inhibitor of Aurora B with IC50 of 0.37 nM, ~ 100 fold more selective for Aurora B over Aurora A.



Barasertib induces polyploidy and apoptosis in cancer cells.

A4112

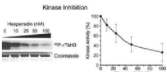


Size: 5 mg, 10 mg, 50 mg.

Soluble in DMSO > 10 mM.

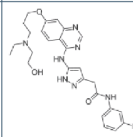
Hesperadin

Hesperadin is a potent inhibitor of Aurora B with IC50 of 250 nM.



Hesperadin inhibits kinase activity.

A4118



Size: 5 mg, 10 mg, 50 mg, 200 mg.

Soluble in DMSO > 10 mM.

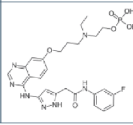
AZD1152

AZD1152 is a highly selective inhibitor of Aurora kinases with IC50 of 1.37 μM and 0.37 nM for Aurora A and B, respectively.

Size: 5 mg, 10 mg, 50 mg.

Soluble in DMSO.

A3214



Aurora C Inhibitor

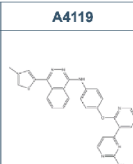
AMG-900

AMG-900 is a potent and highly selective inhibitor of Aurora kinases with IC50 of 5 nM, 4 nM and 1 nM for Aurora A, B and C, respectively.

Size:
5 mg, 10 mg, 50 mg, 200 mg.

Soluble in DMSO > 10 mM.

A4119



PLK1 Inhibitors

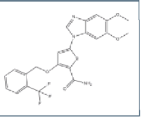
GW843682X

GW843682X is a selective inhibitor of PLK1 and PLK3 with IC50 of 2.2 nM and 9.1 nM, respectively.

Size: 5 mg, 10 mg, 50 mg.

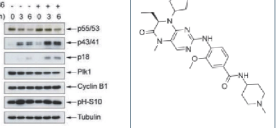
Soluble in DMSO > 10 mM.

A3456



BI 2536

BI 2536 is a potent inhibitor of PLK1 with IC50 of 0.83 nM.



Mitotic shake-off cells treated with or without BI 2536 were stimulated with FasL for the times indicated.

A3965

Size: 5 mg, 10 mg, 50 mg.

Soluble in DMSO > 10 mM.

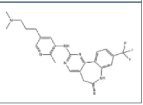
MLN0905

MLN0905 is a potent inhibitor of PLK1 with IC50 of 2 nM.

Size: 2 mg, 5 mg, 25 mg.

Soluble in DMSO > 10 mM.

A8680



- **CDK1/2** 18
- **CHK1** 2
- **Survivin** 38

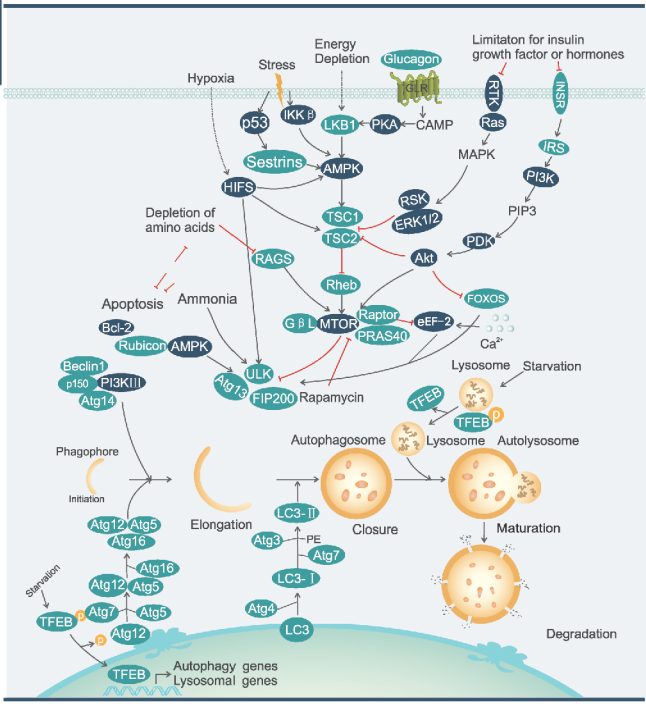
For more targets information, please see our website at "http://www.apexbt.com/research-area/cell-cycle/aurora-kinase.html", or email us: info@apexbt.com.

IC50s compare:

Inhibitors	Aurora A	Aurora B	Aurora C	Other targets
MLN8237	**** 1.2 nM (IC50)			
MK-8745	***** 0.6 nM (IC50)			
VX-680	***** 0.6 nM (Ki)	**** 4.6 nM (Ki)	**** 18 nM (Ki)	FLT3, Bcr-Abl
Danusertib	*** 13 nM (IC50)	*** 79 nM (IC50)	*** 61 nM (IC50)	Bcr-Abl, c-RET, FGFR, TrkA
AZD1152	* 1.37 μM (IC50)	***** 0.37 nM (IC50)		
Barasertib		***** 0.37 nM (IC50)		
Hesperadin		** 250 nM (IC50)		
AMG-900	**** 5 nM (IC50)	**** 4 nM (IC50)	***** 1 nM (IC50)	

Note: "*" represents potency. The higher the number of "*" is, the more potent the inhibitor or activator is.

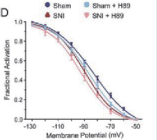
Autophagy Signaling Pathway



PKA Inhibitor

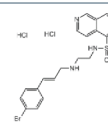
H 89 2HCl

H 89 2HCl is a potent inhibitor of PKA with Ki of 48 nM.



Intracellular application of the H 89 caused a hyperpolarizing shift in both Sham and SNI neurons.

B2190



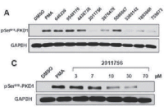
Size: 10 mg, 50 mg, 200 mg.
Soluble in DMSO > 10 mM.

Product Citation:
1. The Journal of Neuroscience 35.38 (2015): 13244 - 13256.

PKD Inhibitors

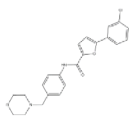
CID 2011756

CID-2011756 is a cell-active, ATP competitive and specific inhibitor of PKD1.



Treatment of CID-2011756 inhibits PKD1 phosphorylation at Ser 916.

A8223



Size: 10 mg, 50 mg.

Soluble in DMSO > 10 mM.

kb NB 142-70

kb NB 142-70 is a selective PKD inhibitor with IC50 of 28.3 nM, 58.7 nM and 53.2 nM for PKD1, 2 and 3, respectively.

Size: 10 mg, 50 mg.

Soluble in DMSO > 10 mM.

A3524

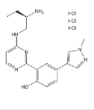
CRT 0066101

CRT 0066101 is a potent inhibitor of PKD with IC50 of 1 nM, 2 nM and 2.5 nM for PKD1, 3 and 2, respectively.

Size: 10 mg.

Limited solubility.

A8679



EEF-2 Inhibitor

A 484954

A 484954 is an inhibitor of EEF-2.

Size: 10 mg, 50 mg.

Soluble in DMSO > 10 mM.

B5618

RSK Inhibitors

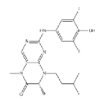
BI-D1870

BI-D1870 is an ATP-competitive inhibitor for RSK1, 2, 3 and 4 with IC50 of 31 nM, 24 nM, 18 nM and 15 nM, respectively.

Size: 5 mg, 10 mg, 50 mg.

Soluble in DMSO > 10 mM.

B2227



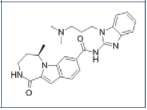
BIX 02565

BIX 02565 is a novel inhibitor of RSK2 with IC50 of 1 nM.

Size: 5 mg, 10 mg, 25 mg, 50 mg, 100 mg.

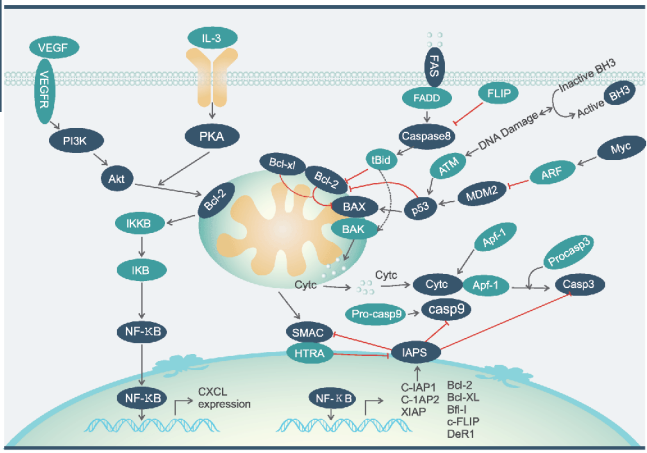
Soluble in DMSO.

B1295



For more targets information, please see our website at "http://www.apexbt.com/research-area/ubiquitination/autophagy.html", or email us: info@apexbt.com.

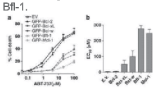
Bcl-2 Signaling Pathway



Bcl-2 Inhibitors

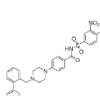
ABT-737

ABT-737 is a BH3 mimetic inhibitor of Bcl-xL, Bcl-2 and Bcl-w with EC50 of 78.7 nM, 30.3 nM and 197.8 nM, respectively; no inhibition observed against Mcl-1, Bcl-B or Bfl-1.



Treatment of ABT-737 induces cell death.

A8193



Size: 5 mg, 10 mg, 50 mg, 100 mg, 500 mg.
Soluble in DMSO > 10 mM.

Product Citation:
1. Sci Signal. 2014 Dec 23.

HA14-1

HA14-1 is a non-peptidic ligand of a Bcl-2 surface pocket with IC50 of 9 μM.

Size: 25 mg, 50 mg, 250 mg.

Soluble in DMSO > 10 mM.

A8168

Bcl-xL Inhibitor

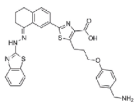
WEHI-539

WEHI-539 has high affinity and selectivity for Bcl-xL (IC50 = 1.1 nM) and potently kills cells by selectively antagonizing its pro-survival activity.

Size: 10 mg.

Soluble in DMSO.

A3935

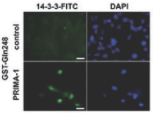


Product Citation:
1.Sci Signal. 2014 Dec 23.

Bax Inhibitors

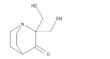
PRIMA-1

PRIMA-1 is an inhibitor of cell-permeable Bax.



Induction of 14-3-3 protein by PRIMA-1 treatment.

A4483

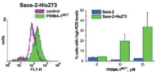


Size: 10 mg, 50 mg.

Soluble to 100 mM in sterile water.

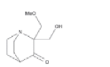
PRIMA-1MET

PRIMA-1MET is methylated derivative of PRIMA-1. It can restore mutant p53 activity.



Treatment of PRIMA-1 met induced ROS in a dosage dependent manner.

A4484



Size: 10 mg, 150 mg.

Soluble in DMSO > 10 mM.

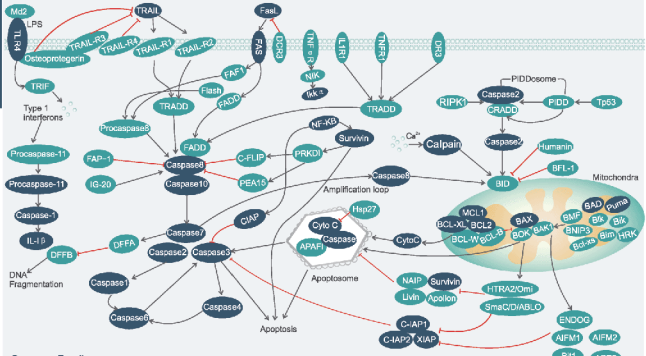
For more targets information, please see our website at "http://www.apexbt.com/research-area/apoptosis/bcl-2-family.html", or email us: info@apexbt.com.

IC50s and EC50s compare:

Inhibitors	Bcl-2	Bcl-xL	Bcl-W
WEHI-539		**** 1.1 μM (IC50)	
HA14-1	* 9 μM (IC50)		
ABT-737	* 30.3 μM (EC50)	* 30.3 μM (EC50)	** 197.8 μM (EC50)

Note: "*" represents potency. The higher the number of "*" is, the more potent the inhibitor or activator is.

Caspase Signaling Pathway

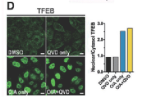


Caspase Family
Caspase 1 subfamily: Caspase-1,4,5,11;
Caspase 2 subfamily: Caspase-2,9;
Caspase 3 subfamily: Caspase-3,6,7,8,10;

Pan-caspase Inhibitors

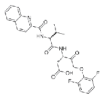
Q-VD-OPh hydrate

Q-VD-OPh hydrate is a cell-permeable and irreversible pan-caspase inhibitor for Caspase-1, -3, -8 and -9 with IC50 of 50 nM, 25 nM, 100 nM and 430 nM, respectively.



Treatment of O/A and QVD prolongs cell viability.

A1901

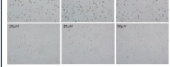


Size:
1 mg, 5 mg, 10 mg, 25 mg.
Soluble in DMSO.

Product Citations:
1. Cell 160.4 (2015): 729 - 744. PMID: 25679764.
2. Nature (2015).

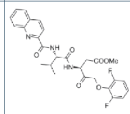
Q-VD(OMe)-OPh

Q-VD(OMe)-Oph is a pan-caspase inhibitor.



Q-VD-OPh rescues Cisplatin-induced cell death.

A8165



Size:
1 mg, 5 mg, 10 mg, 25 mg.
Soluble in DMSO.

Product Citation:
1. Cell Death & Differentiation (2015).

Boc-D-FMK — A1904

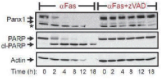
Boc-D-FMK is a pan-caspase inhibitor.

Size: 1 mg, 5 mg, 10 mg, 25 mg.

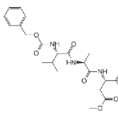
Soluble in DMSO.

Z-VAD-FMK — A1902

Z-VAD-FMK is a cell-permeable and irreversible pan-caspase inhibitor with IC50 of 0.0015 - 5.8 mM.



ZVAD suppresses the proteolytic processing of Panx1.



Size:
1mg, 5 mg, 10 mg, 25 mg.

Soluble in DMSO > 10 mM.

Product Citation:
1. Cancer Letters (2015). PMID: 25636517.
2. The Journal of Immunology (2015): 1401624.

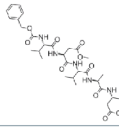
Caspase-2 Inhibitor

Z-VDVAD-FMK — A1922

Z-VDVAD-FMK is an irreversible inhibitor of Caspase-2.

Size: 1 mg, 5 mg, 10 mg, 25 mg.

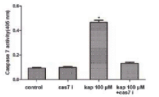
Soluble in DMSO > 10 mM.



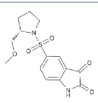
Caspase-3 Activator and Inhibitors

Caspase-3/7 Inhibitor I — A1925

Caspase-3/7 Inhibitor I is an inhibitor for Caspase-3 and Caspase-7 with Ki of 60 nM and 170 nM, respectively.



Human bladder cancer cells were treated with Caspase-3/7 inhibitor I.

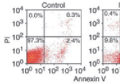


Size:
1 mg, 5 mg, 10 mg, 25 mg.
Soluble in DMSO.

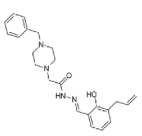
Product Citation:
1. Molecular carcinogenesis, 2014.

PAC-1 — A8177

PAC-1 is a Procaspase-activat -ing compound; it activates Procaspase-3 to produce Caspase-3 (EC50 = 0.22 μM). It also activates Procaspase-7 in a less efficient manner (EC50 = 4.5 μM).



Treatment of PAC-1 induces apoptosis.

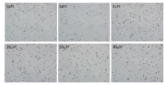


Size: 5 mg, 25 mg.

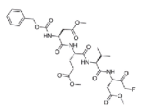
Soluble in DMSO > 10 mM.

Z-DEVD-FMK — A1920

Z-DEVD-FMK is a cell perme -able and irreversible inhibitor of Caspase-3/CPP32. It is also an irreversible inhibitor of Caspase-6, Caspase-7, Caspase-8 and Caspase-10.



Z-DEVD-FMK marginally rescues Cisplatin-induced cell death.



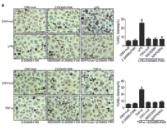
Size:
1 mg, 5 mg, 10 mg, 25 mg.

Soluble in DMSO > 10 mM.

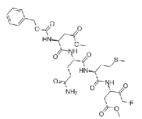
Product Citation:
1. Elife. 2014 Dec 30: e107010.

Z-DQMD-FMK — A1921

Z-DQMD-FMK is an inhibitor of Caspase-3. It inhibits MG 132-induced small lung cancer cell death in vitro.



LPS- or TNF-α-induced permeability develops independently of apoptosis.



Size:
1 mg, 5 mg, 10 mg, 25 mg.

Soluble in DMSO > 10 mM.

Product Citation:
1. Scientific reports 5 (2015).

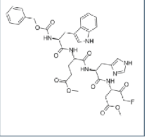
Caspase-5 Inhibitor

Z-WEHD-FMK — A1924

Z-WEHD-FMK is a potent, cell-permeable and irreversible for Caspase-5 inhibitor.

Size: 1 mg, 5 mg, 10 mg, 25 mg.

Soluble in DMSO.



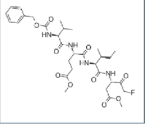
Caspase-6 Inhibitor

Z-VEID-FMK — A1923

Z-VEID-FMK is the specific recognition sequence for Caspase-6 and Mch2.

Size: 1 mg, 5 mg, 10 mg, 25 mg.

Soluble in DMSO.



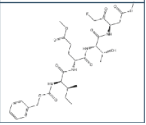
Caspase-8 Inhibitor

Z-LEHD-FMK — B3232

Z-IETD-FMK is a specific inhibitor of Caspase-8.

Size: 1 mg, 5 mg.

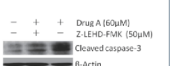
Soluble in DMSO.



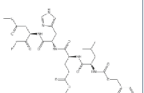
Caspase-9 Inhibitor

Z-LEHD-FMK — B3233

Z-LEHD-FMK is a specific and irreversible inhibitor of Caspase-9.



Effect of Z-LEHD-FMK.



Size: 1 g.

Soluble in DMSO.

TLR4 Inhibitors

TAK-242 — A3850

TAK-242 is recognized as a novel small-molecule compound selectively inhibiting TLR4 signaling.

Size: 10 mg, 100 mg.

Soluble in DMSO.

TAK-242 S enantiomer — A3851

TAK-242 S enantiomer, S enantiomer of TAK-242, is a small-molecule inhibitor of TLR4 signaling.

Size: 100 mg.

Soluble in DMSO.

IL-1β Inhibitor

Pirfenidone — B2288

Pirfenidone is an inhibitor for TGF-β production and TGF-β stimulated collagen production. It also reduces production of TNF-α and IL-1β.

Size: 10 mg, 50 mg.

Soluble in DMSO > 10 mM.

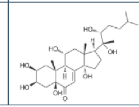
FasL Inhibitor

Muristerone A — A4466

Muristerone A is a TRAIL- and FasL-induced apoptosis inhibitor.

Size: 1 mg.

Soluble in DMSO > 10 mM.



FAS Inhibitor

C75 — A4449

C75 is an inhibitor of FAS.

Size: 10 mg, 50 mg.

Soluble in DMSO > 10 mM.

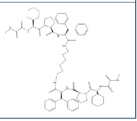
cIAP Inhibitor

BV6 — B4653

BV6, a small-molecule Smac mimetic, is a selective inhibitor of cIAP proteins with IC50 of 7.2 μM.

Size: 5 mg, 25 mg, 100 mg.

Soluble in DMSO.



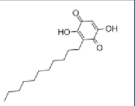
XIAP Inhibitor

Embelin — A8235

Embelin is an inhibitor of XIAP with IC50 of 4.1 μM.

Size: 10 mg, 50 mg.

Soluble in DMSO > 10 mM.



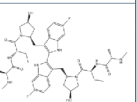
c-IAP1 Inhibitors

Birinapant (TL32711) — A4219

Birinapant (TL32711) is a potent antagonist for XIAP and c-IAP1 with Kd of 45 nM and < 1 nM, respectively.

Size: 10 mg, 50 mg.

Soluble in DMSO > 10 mM.

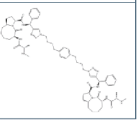


SM-164 — A8815

SM-164 is a bivalent mimetic of Smac with Ki of 0.31 nM, 1.1 nM and 0.56 nM for c-IAP1, c-IAP2 and XIAP, respectively.

Size: 5 mg, 5 mg.

Soluble in DMSO.



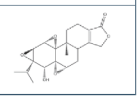
c-IAP2 Inhibitor

Triptolide — A3891

Triptolide is an inhibitor of c-IAP2, IL-2, MMP3, MMP7 and MMP19.

Size: 5 mg, 10 mg, 25 mg, 1 g.

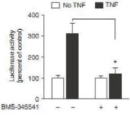
Soluble in DMSO > 10 mM.



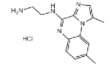
IKK Inhibitor

BMS-345541 — A3248

BMS-345541 is a highly selective inhibitor of IKK-1 and IKK-2 with IC50 of 4 μM and 0.3 μM, respectively.



BMS-345541 inhibits NF-κB activation in primary cortical neurons.



Size: 5 mg, 10 mg, 50 mg.

Soluble in DMSO.

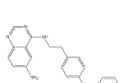
NF-κB Inhibitors

QNZ (EVP4593) — A4217

QNZ is an inhibitor of NF-κB with IC50 of 11 nM in human Jurkat cells.

Size: 5 mg, 25 mg.

Soluble in DMSO > 10 mM.

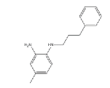


JSH-23 — B1645

JSH-23 is an inhibitor of NF-κB transcriptional activity with an IC50 of 7.1 μM.

Size: 5 mg, 25 mg.

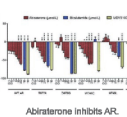
Soluble in DMSO > 10 mM.



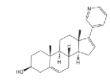
Cyto C Inhibitor

Abiraterone — A4240

Abiraterone is a potent inhibitor of CYP17 with IC50 of 2 nM.



Abiraterone inhibits AR.



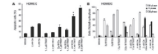
Size: 5 mg, 25 mg, 100 mg.

Limited solubility.

Mcl-1 Inhibitor

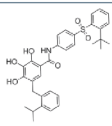
TW-37

TW-37 is a novel nonpeptide inhibitor to recombinant Bcl-2, Bcl-xL and Mcl-1 with KI of 0.29 μM, 1.11 μM and 0.26 μM, respectively.



TW-37 induces apoptosis in tumor cell line.

A4234



Size: 10 mg, 25 mg, 50 mg, 100 mg.
Soluble in DMSO > 10 mM.

Calpain Inhibitor

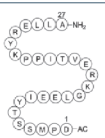
Acetyl-Calpastatin (184-210) (human)

Acetyl-Calpastatin is a selective Calpain inhibitor that strongly inhibits Calpain I (Ki = 0.2 nM) and II.

Size: 1 mg.

Soluble to 5 mg/ml in sterile water.

A4410



IC50s compare:

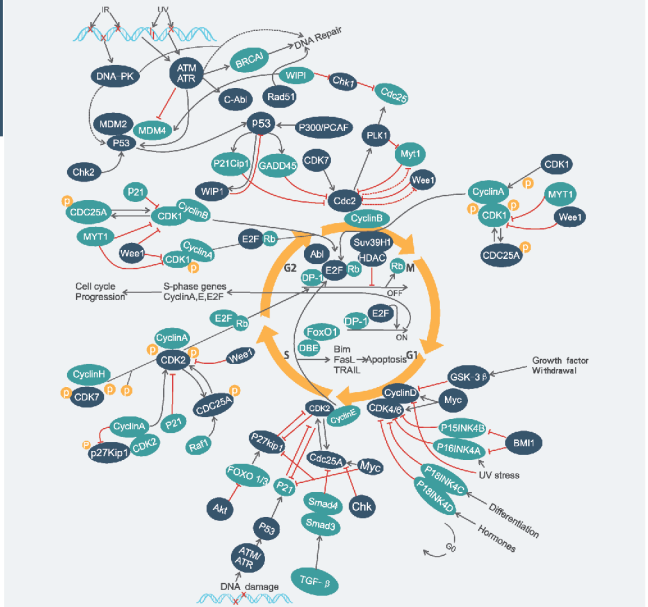
Caspase inhibitors	Pan-caspase	Caspase-1	Caspase-2
Caspase-3/7 inhibitor 1			
Q-VD-OPh hydrate		**** 50 nM (IC50)	
Q-VD(OMe)-OPh	**** 50 nM (IC50)		
VX-765		***** 0.8 nM (KI)	
Z-VDVAD-FMK			*
Z-DEVD-FMK			*
Z-DQMD-FMK			
Z-WEHD-FMK			
Z-VEID-FMK			
Z-FA-FMK			*
Z-IETD-FMK			
Z-LEHD-FMK			
Z-VAD-FMK	*		
Boc-D-FMK	*		

For more targets information, please see our website at "http://www.apexbt.com/research-area/apoptosis/apoptosis-caspase.html", or email us: info@apexbt.com.

Caspase-3	Caspase-5	Caspase-6	Caspase-7	Caspase-8	Caspase-9	Caspase-10
*** 50 nM (Ki)			** 170 nM (Ki)			
**** 50 nM (IC50)					*** 100 nM (IC50)	** 430 nM (IC50)
**** 50 nM (IC50)				*** 100 nM (IC50)		
				***** 0.5 nM (Ki)	** 430 nM (IC50)	
***		*	*	*		*
*						
	***	*				
*	*		*			
				***		
					*	

Note: "*" represents potency. The higher the number of "*" is, the more potent the inhibitor or activator is.

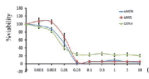
CDK Signaling Pathway



Pan-CDK Inhibitors

Dinaciclib (SCH727965) — A8412

Dinaciclib (SCH727965) is a novel and potent inhibitor of CDK for CDK2, CDK5, CDK1 and CDK9 with IC50 of 1 nM, 1 nM, 3 nM and 4 nM, respectively.



Treatment of Dinaciclib decreases cell viability.

Size: 5 mg, 25 mg.

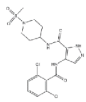
Soluble in DMSO > 10 mM.

NVP-LCQ195 — A3676

NVP-LCQ195 is a pan-inhibitor of CDKs.

Size: 5 mg, 10 mg.

Soluble in DMSO.



Purvalanol B — A8565

Purvalanol B is a selective inhibitor of CDK1, 2 and 4.

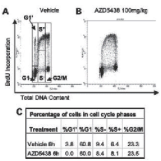
Size: 10 mg, 50 mg.

Soluble in DMSO > 10 mM.

CDK1/2 Inhibitors

AZD 5438 — A8326

AZD 5438 is a potent inhibitor of CDK1, 2 and 9 with IC50 of 16 nM, 6 nM and 20 nM, respectively.



C

Percentage of cells in cell cycle phase					
Treatment	%G1	%G1	%S-	%S+	%G2M
Vehicle 8h	5.8	60.8	8.4	8.4	23.3
AZD5438 8h	0.0	60.0	6.4	8.1	23.5

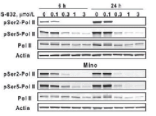
AZD 5438 inhibits cell proliferation.

Size:
25 mg, 100 mg, 250 mg.

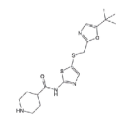
Soluble in DMSO > 10 mM.

SNS-032 (BMS-387032) — A1980

SNS-032 is a selective inhibitor of CDK2 with IC50 of 48 nM.



Treatment of SNS-032 inhibits transcription.



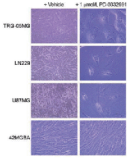
Size: 5 mg, 25 mg, 100 mg.

Soluble in DMSO > 10 mM.

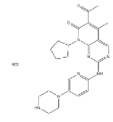
CDK4 Inhibitors

PD 0332991 (Palbociclib) HCl — A8316

Palbociclib (PD 0332991) HCl is a highly selective inhibitor of CDK4 and 6 with IC50 of 11 nM and 16 nM, respectively.



Treatment of PD 0332991 induces cell cycle arrest.

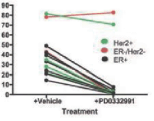


Size: 5 mg, 25 mg.

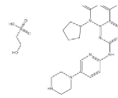
Limited solubility.

Palbociclib(PD0332991) Isethionate — A8335

Palbociclib (PD0332991) Isethionate is a highly selective inhibitor of CDK4 and 6 with IC50 of 11 nM and 16 nM, respectively.



Quantification of Ki67 from PD0332991 treated cultures.



Size: 10 mg, 25 mg, 50 mg.

Limited solubility.

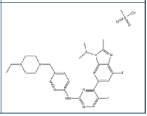
LY2835219

LY2835219 is a potent and selective inhibitor of CDK4 and 6 with IC50 of 2 nM and 10 nM, respectively.

Size: 5 mg, 25 mg, 100 mg.

Soluble in DMSO > 10 mM.

A1794



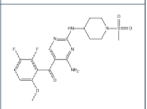
R547

R547 is a potent ATP-competitive inhibitor of CDK1, 2 and 4 with Ki of 2 nM, 3 nM and 1 nM, respectively.

Size: 10 mg, 100 mg.

Soluble in DMSO > 10 mM.

A8642



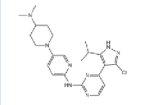
CDK4 inhibitor

CDK4 inhibitor is a selective inhibitor of CDK4 with IC50 of 10 nM.

Size:
10 mg, 25 mg, 50 mg, 100 mg.

Soluble in DMSO.

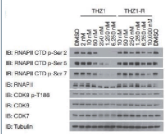
B1233



CDK7 Inhibitors

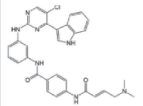
THZ1

THZ1 is an irreversible, potent and selective inhibitor of CDK7 with an IC50 of 3.2 nM.



THZ1 inhibits RNAPII CTD phosphorylation by covalently targeting a unique cysteine located.

A8882



Size: 5 mg, 10 mg, 25 mg.

Soluble in DMSO.

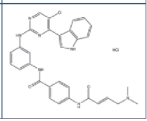
THZ1 Hydrochloride

THZ1 is a covalent inhibitor of CDK7 with IC50 of 3.2 nM.

Size: 5 mg, 10 mg, 25 mg.

Soluble in DMSO.

B4736



CDK9 Inhibitor

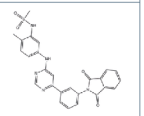
CDK9 inhibitor

CDK9 inhibitor is a small-molecule selective inhibitor of CDK9 with IC50 of 39 nM.

Size:
5 mg, 10 mg, 50 mg, 250 mg.

Soluble in DMSO.

A3294



BMI1 Inhibitor

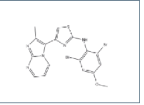
PTC-209

PTC-209 is a small-molecule inhibitor of BMI1 with IC50 of 0.5 μM.

Size: 2 mg, 5 mg.

Soluble in DMSO > 10 mM.

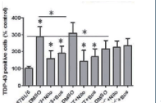
B3179



Abl Inhibitors

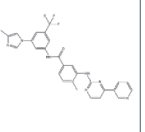
Nilotinib (AMN-107)

Nilotinib (AMN-107) is an inhibitor of Bcr-Abl with IC50 less than 30 nM.



Histograms represent stereological quantification of TDP-43 expressing cells.

A8232

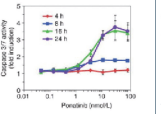


Size: 100 mg, 250 mg, 500 mg, 1 g.

Soluble in DMSO > 10 mM.

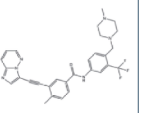
Ponatinib (AP24534)

Ponatinib (AP24534) is a novel, potent multi-target inhibitor of Abl, PDGFRα, VEGFR2, FGFR1 and Src with IC50 of 0.37 nM, 1.1 nM, 1.5 nM, 2.2 nM and 5.4 nM, respectively.



Treatment of Ponatinib induces apoptosis.

A5467

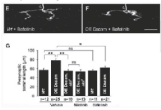


Size: 5 mg, 25 mg, 100 mg.

Soluble in DMSO > 10 mM.

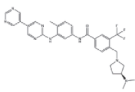
Bafetinib (INNO-406)

Bafetinib (INNO-406) is an orally bioavailable, dual inhibitor of Bcr-Abl and Lyn-kinase with IC50 of 5.8 nM and 19 nM, respectively.



Nilotinib and bafetinib act through Abl inhibition to mitigate Dscam-induced presynaptic arbor enlargement in vivo.

B1011



Size: 5 mg, 10 mg, 50 mg, 200 mg.

Soluble in DMSO > 10 mM.

Product Citation:
1. eLife 4 (2015): e05196. PMID: 25988807.

SUV39H1 Inhibitor

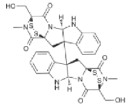
Chaetocin

Chaetocin is a lysine-specific histone methyltransferase inhibitor, which reduces the histone methyltransferase effects of SUV39H1 with IC50 of 0.8 μM.

Size: 1 mg.

Limited solubility.

A4502



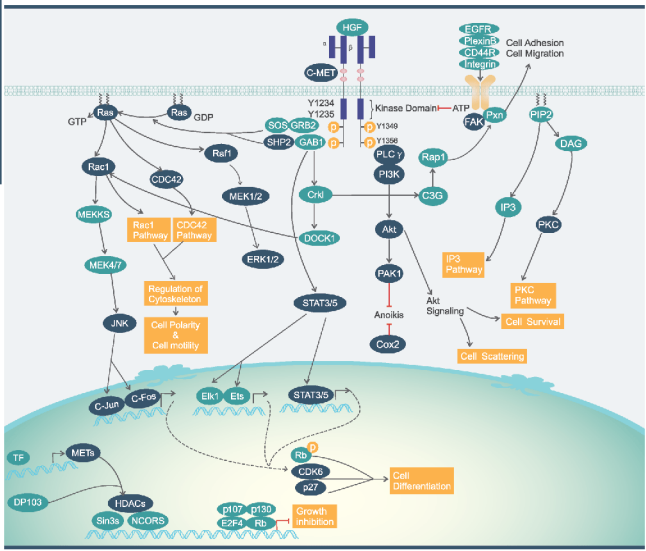
For more targets information, please see our website at "http://www.apexbt.com/research-area/cell-cycle/cyclin-d-kinase.html", or email us: info@apexbt.com.

IC50s compare:

Inhibitors	Pan-CDK	CDK1	CDK2	CDK3	CDK4	CDK5	CDK6	CDK7	CDK9
Dinaciclib		**** 3 nM(IC50)				***** 1 nM(IC50)			**** 4 nM(IC50)
NVP-LCQ195		*	*	*		*			*
Purvalanol B	*	*	*		*				
AZD-5438		*** 16 nM(IC50)	**** 6 nM(IC50)						*** 20 nM(IC50)
SNS-032			*** 48 nM(IC50)					*** 62 nM(IC50)	**** 4 nM(IC50)
Palbociclib HCl					*** 11 nM(IC50)		*** 16 nM(IC50)		
LY2835219					**** 2 nM(IC50)		**** 10 nM(IC50)		
Palbociclib Isethionate					*** 11 nM(IC50)		*** 16 nM(IC50)		
CDK4 inhibitor	*** 10 nM(IC50)								
THZ1								**** 3.2 nM(IC50)	
THZ1 Hydrochloride								**** 3.2 nM(IC50)	
CDK9 inhibitor									*** 39 nM(IC50)

Note: "*" represents potency. The higher the number of "*" is, the more potent the inhibitor or activator is.

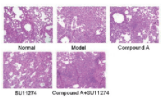
c-Met Signaling Pathway



c-Met Inhibitors

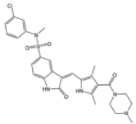
SU11274

SU11274 is a selective inhibitor of c-Met tyrosine kinase with IC50 of 10 nM.



SU12274 abrogates the inhibition effects of compound A on pulmonary fibrosis induced by BLM.

A2678

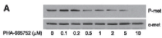


Size: 5 mg, 25 mg, 100 mg.

Soluble in DMSO > 10 mM.

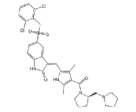
PHA-665752

PHA-665752 is a potent, selective and ATP-competitive inhibitor of c-Met with IC50 of 9 nM, > 50-fold selectivity for c-Met than RTKs or STKs.



Treatment of PHA-665752 inhibits c-Met phosphorylation.

A2307

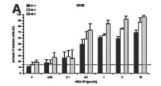


Size: 5 mg, 25 mg, 100 mg.

Soluble in DMSO > 10 mM.

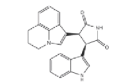
Tivantinib (ARQ 197)

Tivantinib (ARQ 197) is the first non-ATP-competitive inhibitor of c-Met with Ki of 0.355 μM, little activity to Ron, and no inhibition to EGFR, InsR, PDGFRα or FGFR1/4.



Effect of ARQ 197 treatment on apoptosis.

A8325

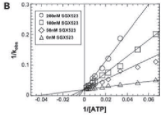


Size: 5 mg, 20 mg, 100 mg.

Soluble in DMSO > 10 mM.

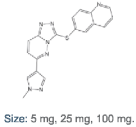
SGX-523

SGX-523 is a selective inhibitor of c-Met with IC50 of 4 nM.



SGX-523 inhibits MET kinase.

A1196

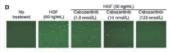


Size: 5 mg, 25 mg, 100 mg.

Limited solubility.

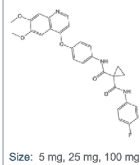
Cabozantinib (XL184, BMS-907351)

Cabozantinib (XL184, BMS-907351) is a potent inhibitor of VEGFR2 with IC50 of 0.035 nM and also inhibits c-Met, Ret, Kit, Flt-1, Flt-3, Flt-4, Tie2 and AXL with IC50 of 1.3 nM, 4 nM, 4.6 nM, 12 nM, 11.3 nM, 6 nM, 14.3 nM and 7 nM, respectively.



Treatment of Cabozantinib inhibits cell invasion.

A2977

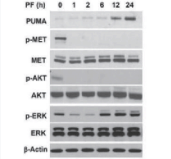


Size: 5 mg, 25 mg, 100 mg.

Soluble in DMSO > 10 mM.

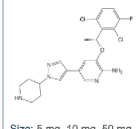
(R)-Crizotinib

(R)-Crizotinib (PF-02341066) is a potent inhibitor of c-Met and ALK with IC50 of 11 nM and 24 nM, respectivley.



HCT116 cells were treated with 12 μmol/L Crizotinib for indicated time.

A3020

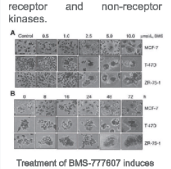


Size: 5 mg, 10 mg, 50 mg.

Limited solubility.

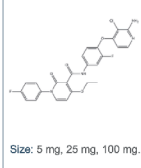
BMS-777607

BMS-777607 is an inhibitor of Met-related for c-Met, Axl, Ron and Tyro3 with IC50 of 3.9 nM, 1.1 nM, 1.8 nM and 4.3 nM, respectively. It is 40-fold more selective for Met-related targets versus Lck, VEGFR2, TrkA/B, and more than 500-fold greater selectivity versus all other receptor and non-receptor kinases.



Treatment of BMS-777607 induces polyploidy.

A5703



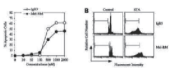
Size: 5 mg, 25 mg, 100 mg.

Soluble in DMSO > 10 mM.

PKC Inhibitors

Staurosporine — A8192

Staurosporine is a potent inhibitor of PKC for PKCα, γ and η with IC50 of 2 nM, 5 nM and 4 nM, respectively.



Treatment of Staurosporine induces apoptosis.

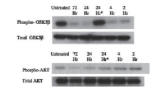
Size: 1 mg, 5 mg, 10 mg.

Limited solubility.

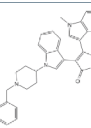
Product Citation:
1. PloS one 9.9 (2014): e107010.

Enzastaurin (LY317615) — A1670

Enzastaurin (LY317615) is a potent and selective inhibitor of PKCβ with IC50 of 6 nM.



Enzastaurin decreases phosphorylation of GSK3β and AKT.



Size: 5 mg, 25 mg, 100 mg.

Soluble in DMSO > 10 mM.

Ro 31-8220 — B1287

Ro 31-8220 is an inhibitor of pan-PKC with IC50 of 5 nM, 24 nM, 14 nM, 27 nM, and 24 nM for PKCα, βI, βII, γ, and ε, respectively.

Size: 10 mg, 50 mg.

Soluble in DMSO.

Go 6976 — A8341

Go 6976 is a selective inhibitor of PKC with IC50 of 20 nM.

Size: 5 mg, 25 mg.

Soluble in DMSO > 10 mM.

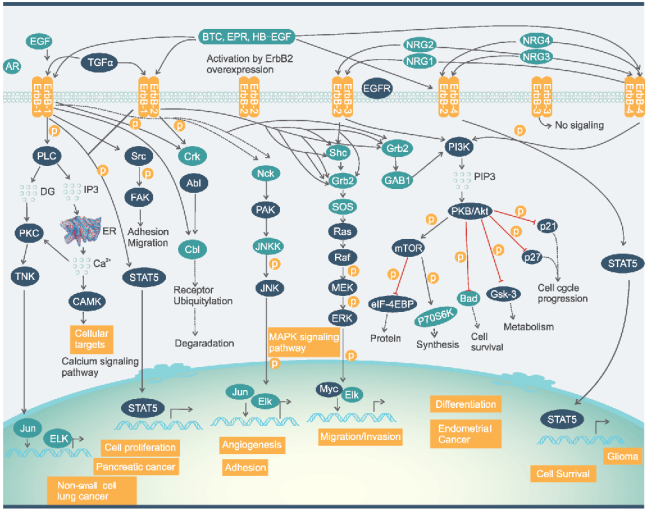
For more targets information, please see our website at "http://www.apexbt.com/research-area/tyrosine-kinase/c-met.html", or email us: info@apexbt.com.

IC50s compare:

Inhibitors	c-Met
SU11274	**** 10 nM（IC50）
PHA-665752	**** 9 nM（IC50）
Tivantinib	** 0.355 μM（KI）
BMS-777607	**** 3.9 nM（IC50）
(R)-Crizotinib	*** 11 nM（IC50）
Cabozantinib	**** 1.3 nM（IC50）
SGX-523	**** 4 nM（IC50）

Note: "*" represents potency. The higher the number of "*" is, the more potent the inhibitor or activator is.

EGFR Signaling Pathway



EGFR Inhibitors

Compound 56

Compound 56 is a cell-permeable, reversible and ATP-competitive inhibitor of tyrosine kinase activity of EGFR with IC50 of 0.006 nM.

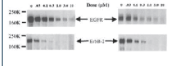
Size: 500 µg, 5 mg.

Soluble in DMSO.

A8197

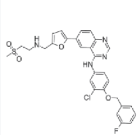
Lapatinib

Lapatinib is a potent inhibitor of EGFR and HER2 with IC50 of 10.8 nM and 9.2 nM, respectively.



Treatment of Lapatinib inhibits EGFR and ErbB2 phosphorylation.

A8218

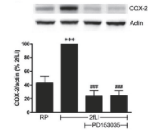


Size: 25 mg, 100 mg.

Soluble in DMSO > 10 mM.

PD153035 hydrochloride — A8199

PD153035 is a potent and specific inhibitor of EGFR with Ki and IC50 of 5.2 pM and 29 pM, respectively.



Treatment of EGFR inhibitor PD153035.

Size: 10 mg, 50 mg.

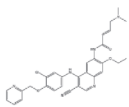
Limited solubility.

Neratinib (HKI-272) — A8322

Neratinib (HKI-272) is a highly selective inhibitor of HER2 and EGFR with IC50 of 59 nM and 92 nM, respectively.

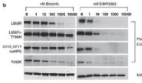
Size: 5 mg, 25 mg.

Limited solubility.

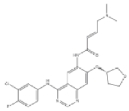


Afatinib (BIBW2992) — A8247

Afatinib (BIBW2992) is an irreversible inhibitor of EGFR/HER2 for EGFR (wt), EGFR (L858R), EGFR (L858R/T790M) and HER2 with IC50 of 0.5 nM, 0.4 nM, 10 nM and 14 nM, respectively; 100-fold more active against Gefitinib-resistant L858R-T790M EGFR mutant.



Treatment of Afatinib inhibits EGFR phosphorylation.

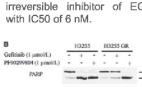


Size: 5 mg, 10 mg, 50 mg.

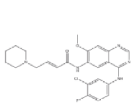
Soluble in DMSO > 10 mM.

Dacomitinib (PF299804, PF299) — A8319

Dacomitinib is a potent and irreversible inhibitor of EGFR with IC50 of 6 nM.



Treatment of Dacomitinib induces apoptosis.

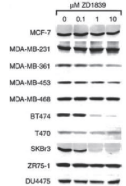


Size: 5 mg, 25 mg.

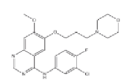
Soluble in DMSO > 10 mM.

Gefitinib (ZD1839) — A8219

Gefitinib (ZD-1839) is an inhibitor of EGFR for Tyr1173, Tyr992, Tyr1173 and Tyr992 in the NR6wtEGFR and NR6W cells with IC50 of 37 nM, 37nM, 26 nM and 57 nM, respectively.



Treatment of Gefitinib effects Akt phosphorylation.

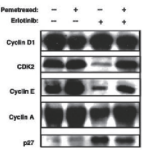


Size: 100 mg, 250 mg.

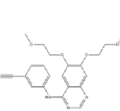
Soluble in DMSO > 10 mM.

Erlotinib Hydrochloride — A8234

Erlotinib Hydrochloride is a selective inhibitor of EGFR with IC50 of 2 nM, > 1000-fold more sensitive for EGFR than human c-Src or v-Abl.



Effect of Erlotinib on cell cycle.

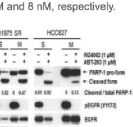


Size: 1 g, 5 g.

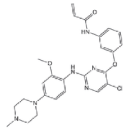
Limited solubility.

WZ4002 — A1389

WZ4002 is a novel and mutant-selective inhibitor of EGFR for EGFR (L858R) and EGFR (T790M) with IC50 of 2 nM and 8 nM, respectively.



WZ4002 inhibits EGFR phosphorylation and induces apoptosis.



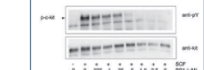
Size: 5 mg, 25 mg, 100 mg.

Soluble in DMSO > 10 mM.

Src Inhibitors

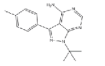
PP1

PP1 is a potent and selective inhibitor of Src for Lck and Fyn with IC50 of 5 nM and 6 nM, respectively.



PP1 inhibits c-Kit autophosphorylation.

A8215



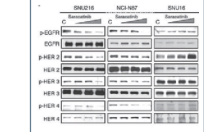
Size: 5 mg, 10 mg, 25 mg.

Soluble in DMSO > 10 mM.

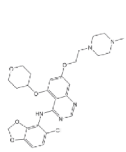
Saracatinib (AZD0530)

A2133

Saracatinib (AZD0530) is a potent inhibitor of Src with IC50 of 2.7 nM, and potent to c-Yes, Fyn, Lyn, Blk, Fgr and Lck; less active for Abl and EGFR (L858R and L861Q).



Treatment of Saracatinib affects the phosphorylation of EGFR, HER2 and HER4.



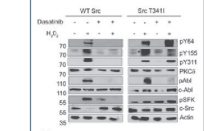
Size: 5 mg, 25 mg, 100 mg.

Soluble in DMSO > 10 mM.

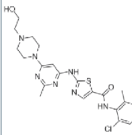
Dasatinib (BMS-354825)

A3017

Dasatinib is a small-molecule inhibitor of both the Src and Bcr-Abl tyrosine kinases with IC50 of 0.5 nM and 1 nM, respectively.



293T cells were transfected with wild type c-Abl, or the gatekeeper mutation for c-Abl T315I.



Size: 100 mg, 500 mg.

Soluble in DMSO > 10 mM.

FAK Inhibitors

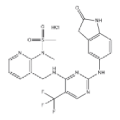
PF-562271 HCl

A8345

PF-562271 HCl, the hydrochloride salt of PF-562271, is a potent, ATP-competitive, reversible inhibitor of FAK with IC50 of 1.5 nM.

Size: 5 mg, 50 mg.

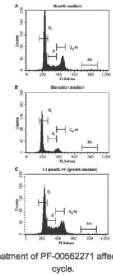
Soluble in DMSO > 10 mM.



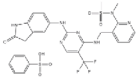
PF-00562271

A8320

PF-00562271, the benzene sulfonate salt of PF-562271, is a potent, ATP-competitive and reversible inhibitor of FAK with IC50 of 1.5 nM, ~10-fold less potent for Pyk2 than for FAK, and >100-fold selectivity against other protein kinases, except for some CDKs.



Treatment of PF-00562271 affects cell cycle.



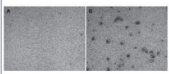
Size: 5 mg, 25 mg.

Soluble in DMSO > 10 mM.

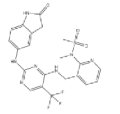
PF-562271

A8310

PF-562271 is a potent, ATP-competitive and reversible inhibitor of FAK with IC50 of 1.5 nM, ~10-fold less potent for Pyk2 than for FAK, and >100-fold selectivity against other protein kinases, except for some CDKs.



Treatment of PF-00562271 induces apoptosis.

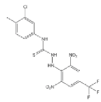


Size: 5 mg, 25 mg.

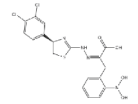
Soluble in DMSO > 10 mM.

EGFR

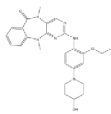
RAS Inhibitor

Kobe0065	B3586
Kobe0065 is a small-molecule inhibitor of Ras with Ki of 46 μM for the binding of H-Ras.GTP to c-Raf-1. Size: 1 mg. Soluble in DMSO.	

EIF4E Inhibitor

4EGI-1	B3696
4EGI-1 is a competitive inhibitor of EIF4E/EIF4G interaction by binding to EIF4E with Kd of 25 μM. Size: 10 mg, 25 mg. Soluble in DMSO > 10 mM.	

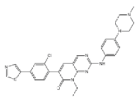
ERK Inhibitor

XMD8-92	A3943
XMD8-92 is a potent and selective inhibitor of ERK5 with Kd of 80 nM. Size: 10 mg, 50 mg, 100 mg. Soluble in DMSO > 10 mM.	

- **STAT**.....41
- **PLC**.....34
- **PKC**.....23
- **JNK**.....50
- **CaMK**.....34
- **Abl**.....19
- **Raf**.....63
- **MEK**.....43
- **PI3K**.....57
- **Akt**.....59
- **mTOR**.....47
- **GSK-3**.....52

For more targets information, please see our website at "http://www.apexbt.com/research-area/tyrosine-kinase/egfr.html", or email us: info@apexbt.com.

PAK Inhibitor

FRAX597	B1162
FRAX597 is a potent and ATP-competitive inhibitor of group I p21-activated kinases (PAKs) with IC50 of 8 nM, 13 nM and 19 nM for PAK1, 2 and 3, respectively. Size: 5 mg, 25 mg. Soluble in DMSO > 10 mM.	

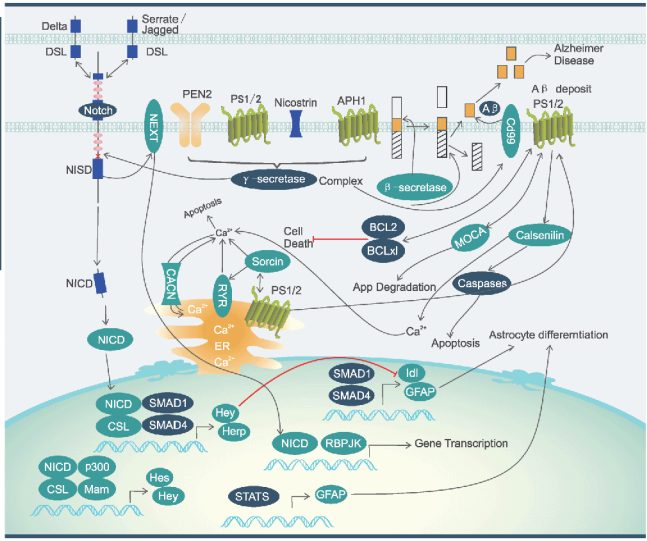
P27 Inducer

SMIP004	A3826
SMIP004 is a novel inducer of cancer-cell selective apoptosis of human prostate cancer cells with IC50 of 1.09 μM. Size: 5 mg, 10 mg, 25 mg, 50 mg. Soluble in DMSO.	

Inhibitors	ErbB1 (EGFR,HER1)	ErbB2 (HER2)	ErbB3 (HER3)	L858R /T790M EGFR	L858R EGFR
Compound 56	***** 0.006 nM(IC50)				
Lapatinib	*** 10.8 nM(IC50)	**** 9.2 nM(IC50)			
PD153035 hydrochloride	***** 0.029 nM(IC50) 0.0052 nM(Ki)				
Afatinib	***** 0.5 nM(IC50)	*** 14 nM(IC50)			
Dacomitinib	**** 6 nM(IC50)	*** 45.7 nM(IC50)	*** 73.7 nM(IC50)		
Gefitinib	*** 26-57 nM(EC50)				
Erlotinib Hydrochloride	**** 2 nM(IC50)				
WZ4002				**** 8 nM(IC50)	**** 2 nM(IC50)
Neratinib	*** 92 nM(IC50)	*** 59 nM(IC50)			

Note: "*" represents potency. The higher the number of "*" is, the more potent the inhibitor or activator is.

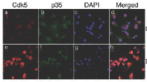
Gamma Secretase Signaling Pathway



γ-secretase Inhibitors

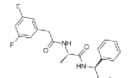
DAPT (GSI-IX)

DAPT (GSI-IX) is a novel inhibitor of γ-secretase with IC50 of 20 nM in HEK 293 cells.



Treatment of DAPT increases CDK5 level.

A8200

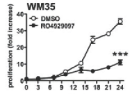


Size: 5 mg, 50 mg, 500 mg.

Soluble in DMSO > 10 mM.

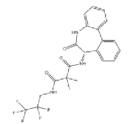
RO4929097

RO4929097 is an inhibitor of γ-secretase with IC50 of 4 nM, inhibiting cellular processing of A β40 and Notch with EC50 of 14 nM and 5 nM, respectively.



RO4929097 inhibits cell proliferation.

A4005

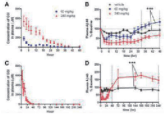


Size: 5 mg, 10 mg, 50 mg, 200 mg.

Soluble in DMSO > 10 mM.

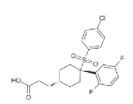
MK-0752

MK-0752 is a potent γ-secretase inhibitor in clinical development (IC50 = 50 nM).



Plasma levels of Aβ during and after γ secretase inhibition.

A4006

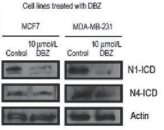


Size: 5 mg, 10 mg, 50 mg, 100 mg.

Soluble in DMSO > 10 mM.

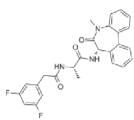
YO-01027 (Dibenzazepine, DBZ)

YO-01027 (Dibenzazepine, DBZ) is a dipeptidic inhibitor of γ-secretase with IC50 of 2.6 nM and 2.9 nM for APPL and Notch cleavage, respectively.



Cleaved Notch in MDA-MB-231 with or without DBZ.

A4018



Size: 5 mg, 10 mg, 25 mg, 50 mg.

Soluble in DMSO > 10 mM.

Notch Inhibitor

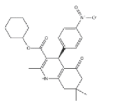
FLI-06

FLI-06 is a novel inhibitor of Notch signaling with EC50 of 2.3 μM.

Size: 10 mg, 25 mg.

Soluble in DMSO > 10 mM.

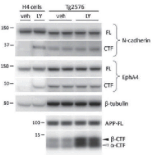
B3083



Aβ Blocker

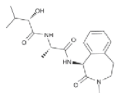
Semagacestat (LY450139)

Semagacestat (LY450139) is a blocker of γ-secretase for Aβ42, 40 and 38 with IC50 of 10.9 nM, 12.1 nM and 12.0 nM, respectively. It also inhibits Notch signaling with IC50 of 14.1 nM.



N-cadherin and EphA4 processing in the presence of LY450139.

A8190



Size:5 mg, 10 mg, 50 mg, 200 mg.

Soluble in DMSO > 10 mM.

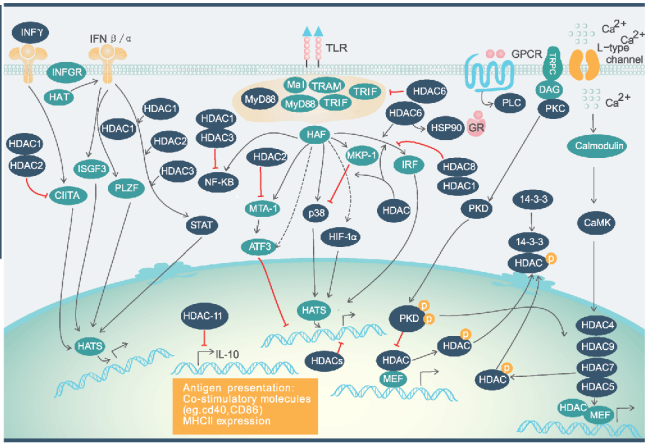
For more targets information, please see our website at "http://www.apexbt.com/research-area/proteases/gamma-secretase.html", or email us: info@apexbt.com.

IC50s compare:

Inhibitors	γ-secretase	γ-secretase (APP)	γ-secretase (Aβ40)	γ-secretase (Notch)
DAPT		*** 20 nM(IC50)		
RO4929097	**** 4 nM(IC50)		*** 14 nM(IC50)	**** 5 nM(IC50)
MK-0752	**** 5 nM(IC50)			
YO-01027		**** 2.6 nM(IC50)		**** 5 nM(IC50)

Note: "*" represents potency. The higher the number of "*" is, the more potent the inhibitor or activator is.

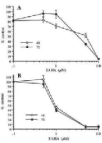
HDAC Signaling Pathway



Pan-HDAC Inhibitors

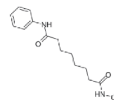
Vorinostat

Vorinostat (suberoylanilide hydroxamic acid, SAHA) is an inhibitor of HDAC with IC50 of 10 nM.



HA inhibits proliferation in cancer cell.

A4084



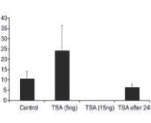
Size: 500 mg.

Soluble in DMSO > 10 mM.

Product Citation:
1. Scientific reports 5 (2015).

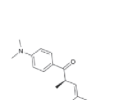
Trichostatin A (TSA)

Trichostatin A is an inhibitor of HDAC with IC50 of 1.8 nM.



TSA replaces FGF-2 in the reprogramming process.

A8183

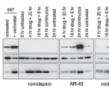


Size: 1 mg, 5 mg, 25 mg, 100 mg.

Soluble in DMSO > 10 mM.

AR-42

AR-42 is an inhibitor of HDAC with IC50 of 30 nM.



AR-42 increases the acetylation of histone H3 and tubulin.

A4104

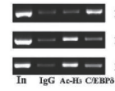
Size: 10 mg, 50 mg.

Soluble in DMSO > 10 mM.

Product Citation:
1. Epigenomics 7.4 (2015): 641 - 652.

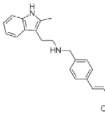
Panobinostat (LBH589)

Panobinostat (LBH589) is a novel and broad-spectrum inhibitor of HDAC with IC50 of 5 nM.



ChIP analysis of the binding of C/EBP5 aromatase in the presence of Panobinostat.

A8178

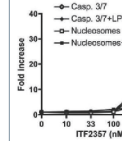


Size: 10 mg, 50 mg, 200 mg, 500 mg.

Soluble in DMSO > 10 mM.

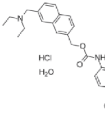
ITF2357 (Givinostat)

ITF2357 (Givinostat) is a potent inhibitor of HDAC with IC50 of 7.5 - 16 nM.



ITF2357 increases caspase activity and nucleosome formation.

A4093

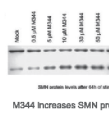


Size: 5 mg, 10 mg, 50 mg, 200 mg.

Soluble in DMSO > 10 mM.

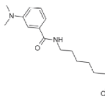
M344

M344 is a potent inhibitor of HDAC with IC50 of 100 nM and able to induce cell differentiation.



M344 increases SMN protein level.

A4105

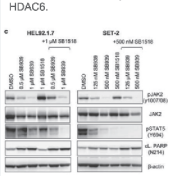


Size: 5 mg, 50 mg.

Soluble in DMSO > 10 mM.

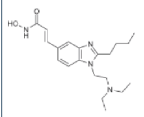
Pracinostat (SB939)

Pracinostat (SB939) is a potent inhibitor of HDAC with IC50 of 40 - 140 nM with exception for HDAC6.



Pracinostat downregulates JAK signaling.

A4095

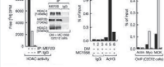


Size: 5 mg, 10 mg, 50 mg.

Soluble in DMSO > 10 mM.

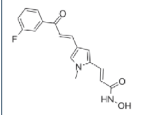
MC1568

MC1568 is a selective inhibitor of HDAC for maize HD1-A with IC50 of 100 nM. It is 34-fold more selective for HD1-A than HD1-B.



MC1568 blocks MEF2D transcriptional activity in C2C12 cells.

A4094

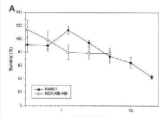


Size: 10 mg, 25 mg.

Soluble in DMSO > 10 mM.

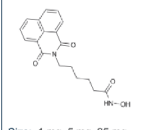
Scriptaid

Scriptaid is an inhibitor of HDAC.



Cancer line survival curve with the treatment of Scriptaid.

A4106



Size: 1 mg, 5 mg, 25 mg, 100 mg.

Soluble in DMSO > 10 mM.

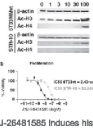
HDAC

HDAC1 Inhibitors

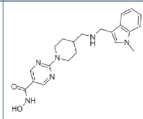
Quisinostat (JNJ-26481585)

A4090

Quisinostat (JNJ-26481585) is a novel and second-generation inhibitor of HDAC with highest potency for HDAC1 with IC50 of 0.11 nM.



JNJ-26481585 induces histone acetylation and inhibits cancer cell proliferation.



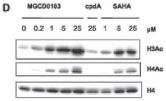
Size: 5 mg, 10 mg, 50 mg, 200 mg.

Soluble in DMSO > 10 mM.

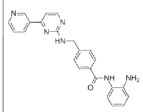
Mocetinostat (MGCD0103, MG0103)

A4089

Mocetinostat (MGCD0103) is a potent inhibitor of HDAC with most potency for HDAC1 with IC50 of 0.15 μM, 2- to 10- fold selectivity against HDAC2, 3 and 11.



Mocetinostat induces histone acetylation in cancer cell lines.



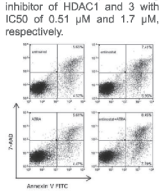
Size: 5 mg, 10 mg, 25 mg, 50 mg.

Soluble in DMSO > 10 mM.

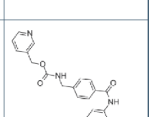
Entinostat (MS-275,SNDX-275)

A8171

Entinostat (MS-275) is a strong inhibitor of HDAC1 and 3 with IC50 of 0.51 μM and 1.7 μM, respectively.



Entinostat has minimal effect on apoptosis.



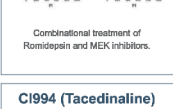
Size: 10 mg, 50 mg, 500 mg.

Soluble in DMSO > 10 mM.

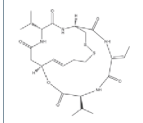
Romidepsin

A8173

Romidepsin (FK228, depsipeptide) is a potent and selective inhibitor of HDACs with IC50 of 36 nM, 47 nM, 510 nM and 14,000 nM for HDAC1, 2, 4 and 6, respectively.



Combinational treatment of Romidepsin and MEK inhibitors.



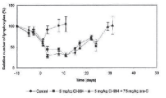
Size: 1 mg, 5 mg.

Soluble in DMSO > 10 mM.

CI994 (Tacedinaline)

A4102

CI994 (Tacedinaline), an anti-cancer drug, is an inhibitor of HDAC1 with IC50 of 0.57 μM and causes G1 cell cycle arrest.



Relative lymphocyte cell number after CI994 treatment.

Size: 10 mg, 50 mg.

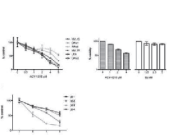
Soluble in DMSO > 10 mM.

HDAC6 Inhibitors

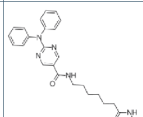
Rocilinostat (ACY-1215)

A4083

Rocilinostat (ACY-1215) is a selective inhibitor of HDAC6 with IC50 of 5 nM.



ACY-1215 induces cytotoxicity in cancer lines.



Size: 5 mg, 10 mg, 50 mg, 200 mg.

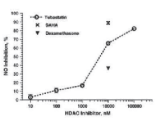
Soluble in DMSO > 10 mM.

Product Citation:
1. Scientific reports 5 (2015).

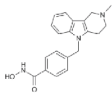
Tubastatin A

A4101

Tubastatin A is a potent and selective inhibitor of HDAC6 with IC50 of 15 nM.



Tubastatin A inhibits NO secretion.



Size: 10 mg, 50 mg, 100 mg, 200 mg.
Soluble in DMSO > 10 mM.

Product Citation:
1. Scientific reports 5 (2015). PMID: 26166158.

HDAC8 Inhibitor

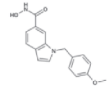
PCI-34051

A4091

PCI-34051 is a potent and specific inhibitor of HDAC8 with IC50 of 10 nM.

Size: 10 mg, 100 mg.

Soluble in DMSO > 10 mM.



HDAC10 Inhibitor

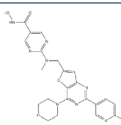
CUDC-907

A4097

CUDC-907 is a dual inhibitor of PI3K and HDAC with IC50 of 19 nM, 1.7 nM, 5 nM, 1.8 nM and 2.8 nM for PI3Kα, HDAC1, 2, 3 and 10, respectively.

Size:
5 mg, 10 mg, 50 mg, 200 mg.

Soluble in DMSO > 10 mM.

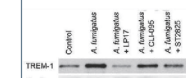


MyD88 Inhibitor

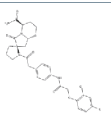
ST 2825

A3840

ST 2825 is an inhibitor of MyD88 pharmacologic.



TREM-1 can be inhibited by the inhibitor of MyD88-ST 2825 potently



Size: 1 mg, 5 mg, 10 mg.
Soluble in DMSO.

Product Citation:
1. Int Immunopharmacol1. 2014.Sep.18.pii: S156 - 5769.

HIF-1α Inhibitor

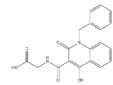
IOX2(Glycine)

A4189

IOX2 is a potent inhibitor of HIF-1 α PHD2 with IC50 of 21 nM.

Size: 10 mg, 50 mg.

Soluble in DMSO > 10 mM.

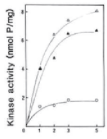


CaMK Inhibitor

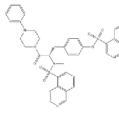
KN-62

A8180

KN-62 is a potent and specific inhibitor of CaMKII with Ki of 0.9 μM.



Effect of KN-62 on the autophosphorylation of calcium dependent protein kinase II.



Size: 1 mg, 5 mg, 25 mg.

Soluble in DMSO > 10 mM

PLC Inhibitor

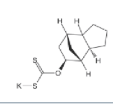
SPK-601

A3833

SPK-601(LMV-601) is a potent PC-PLC inhibitor and a useful antimicrobial agent.

Size: 10 mg, 50 mg.

Soluble in DMSO.



- **STAT** **41**
- **NF-κB** **14**
- **p38** **49**
- **HSP90** **37**
- **PKC** **23**
- **PKD** **8**

For more targets information, please see our website at "http://www.apexbt.com/kits/chromatin-epigenetics/hdac.html", or email us: info@apexbt.com.

HDAC

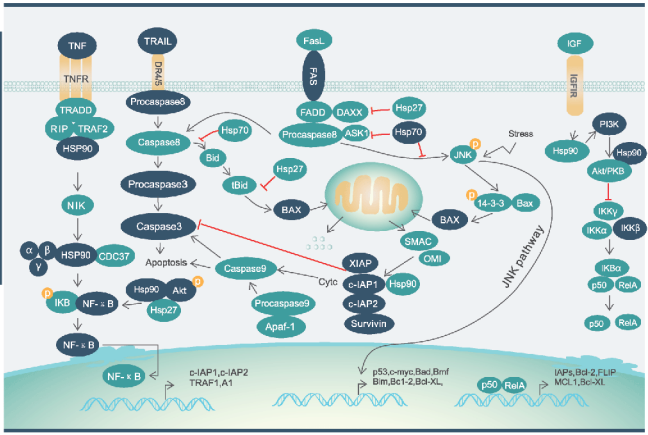
IC50s compare:

HDAC inhibitors	pan-HDAC	HDAC1	HDAC2	HDAC3	HDAC4	HDAC5	HDAC6	HDAC7
Vorinostat	**** 10 nM(IC50)	*	*	*	*	*	*	*
AR-42	*** 30 nM(IC50)	*	*	*	*	*	*	*
Trichostatin A	**** 1.8 nM(IC50)							
Givinostat	**** 7.5-16 nM(IC50)							
M344	** 100 nM(IC50)							
Panobinostat	*	*	*	*	*	*	*	*
Pracinostat		*** 49 nM(IC50)		*** 43 nM(IC50)	*** 56 nM(IC50)	*** 47 nM(IC50)		
MC1568					*	*	*	*
Scriptaid		** 0.6 μM(IC50)		** 0.6 μM(IC50)				
JNJ-26481585		***** 0.11 nM(IC50)	***** 0.33 nM(IC50)		***** 0.64 nM(IC50)			
Mocetinostat		** 0.15 μM(IC50)	** 0.29 μM(IC50)					
Romidepsin		*** 36 nM(IC50)	*** 47 nM(IC50)					
Entinostat		** 0.51 μM(IC50)		* 1.7 μM(IC50)				
Tacedinaline		** 0.57 μM(IC50)						
Tubastatin A							*** 15 nM(IC50)	
CUDC-907		**** 1.7 nM(IC50)	**** 5 nM(IC50)	**** 1.8 nM(IC50)				
Rocilinostat							**** 5 nM(IC50)	
PCI-34051								

Note: "*" represents potency. The higher the number of "*" is, the more potent the inhibitor or activator is.

HDAC8	HDAC9	HDAC10	HDAC11
*	*	*	*
*	*	*	*
*	*	*	*
	*** 70 nM(IC50)	*** 40 nM(IC50)	
	*	*	
* 1 μM(IC50)			
		**** 2.8 nM(IC50)	
**** 10 nM(IC50)			

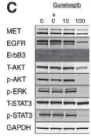
HSP Signaling Pathway



HSP90 Inhibitors

Ganetespib (STA-9090)

Ganetespib (STA-9090) is an inhibitor of HSP90 with IC50 of 4 nM in OSA 8 cells.



Treatment of Ganetespib downregulates Met, EGFR and Akt.

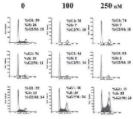
A4385

Size: 200 mg.

Soluble in DMSO > 10 mM.

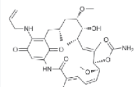
17-AAG (KOS953)

17-AAG (Tanespimycin) is a potent inhibitor of HSP90 with IC50 of 5 nM.



17-AAG treatment in cancer line causes cell cycle arrest.

A4054



Size: 10 mg, 50 mg, 100 mg, 200 mg.

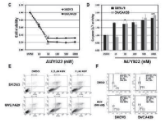
Soluble in DMSO > 10 mM.

Product Citation:
1.Cancer chemotherapy and pharmacology. (2014):1 - 10.

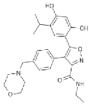
AUY922 (NVP-AUY922)

A4057

AUY922 (NVP-AUY922) is a highly potent inhibitor of HSP90 for HSP90α and β with IC50 of 13 nM and 21 nM, respectively.



AUY922 induces apoptosis in cancer lines.



Size: 10 mg, 100 mg.

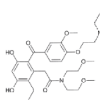
Soluble in DMSO > 10 mM.

KW-2478

A4062

KW-2478 is a novel, non-ansamycin and potent inhibitor of HSP90 with IC50 of 3.8 nM.

Size:
5 mg, 10 mg, 50 mg, 100 mg.
Soluble in DMSO > 10 mM.



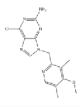
BIIB021

A4058

BIIB021 is a selective and competitive inhibitor of HSP90 with Ki of 1.7 nM.

Size:
5 mg, 10 mg, 50 mg, 100 mg.

Soluble in DMSO > 10 mM.

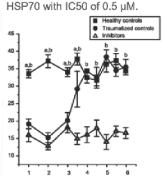


HSP70 Inhibitor

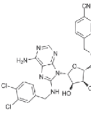
VER 155008

A4387

VER 155008 is a novel adenosine-derived inhibitor of HSP70 with IC50 of 0.5 μM.



Effect of specific pharmacological inhibitors on the recovery of vibration sensitivity in Nematostella vectensis



Size: 10 mg, 50 mg.

Soluble in DMSO > 10 mM.

IKKβ Inhibitors

Bay 65-1942 HCl salt

A3230

Bay 65-1942 is an IKKβ inhibitor.

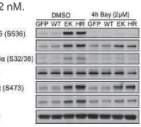
Size: 5 mg, 10 mg.

Soluble in DMSO.

Bay 65-1942 R form

A3231

Bay 65-1942 R form is an ATP-competitive and selective inhibitor of IKKβ kinase with IC50 of 2 nM.



Treatment of Bay 65-1942 completely abrogates the phosphorylation of p65 and IκBα in cells.

Size: 5 mg, 10 mg.

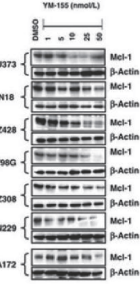
Soluble in DMSO.

Survivin Inhibitors

YM155

A4221

YM155 (Sepantronium Bromide) is a potent inhibitor of Survivin promoter activity with IC50 of 0.54 nM.



YM155 downregulates Mcl-1.

Size: 5 mg, 10 mg, 25 mg, 100 mg.

Soluble in DMSO > 10 mM.

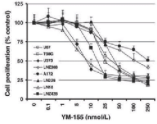
Product Citation:
1. Eur Rev Med Pharmacol Sci 19.11 (2015): 2062 - 2069.

HSP

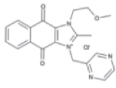
YM-155 hydrochloride

A3947

YM-155 hydrochloride is a potent and small-molecule inhibitor of Survivin with IC50 of 0.54 nM.



YM155 inhibits cell proliferation.



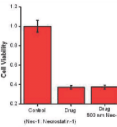
Size: 25 mg, 50 mg.

Soluble in DMSO > 10 mM.

Necrostatin-1

A4213

Necrostatin-1 is a specific inhibitor of RIP1 and inhibits TNF-α-induced necroptosis with EC50 of 490 nM.



The addition of Necrostatin-1 at a certain dose can partly improve the cell viability of MCF-7 cells in the presence of drug treatment.

Size: 10 mg, 100 mg.

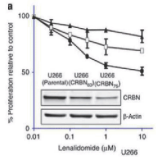
Soluble in DMSO > 10 mM.

TNF Inhibitors

Lenalidomide (CC-5013)

A4211

Lenalidomide (CC-5013) is an inhibitor of TNF-α secretion with IC50 of 13 nM.



Decrease of CRBN in the presence of Lenalidomide.

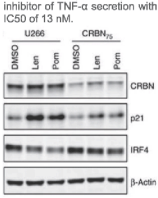
Size: 50 mg, 100 mg, 250 mg, 500 mg.

Soluble in DMSO > 10 mM.

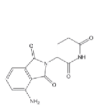
Pomalidomide (CC-4047)

A4212

Lenalidomide (CC-5013) is an inhibitor of TNF-α secretion with IC50 of 13 nM.



Levels of CRBN, p21 and IRF4 in the presence of Lenalidomide and Pomalidomide.



Size: 5 mg, 10 mg, 50 mg, 200 mg.

Soluble in DMSO > 10 mM.

- **FAS** 13
- **Akt** 59
- **Caspase** 11
- **Bax** 10
- **XIAP** 14
- **c-IAP** 13
- **PI3K** 57
- **NF-κB** 14

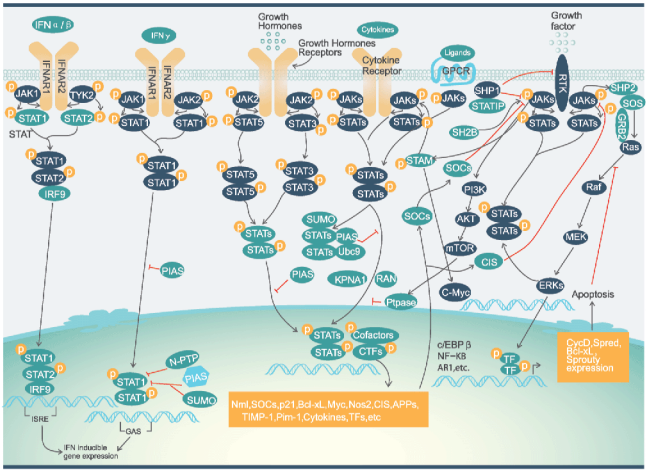
For more targets information, please see our website at "http://www.apexbt.com/research-area/metabolism/hsp.html", or email us: info@apexbt.com.

IC50s and EC50 compare:

Inhibitors	HSP90	HSP70	HSP90
KW-2478	**** 3.8 nM(IC50)		
BIIB021	***** 1.7 nM(Ki) 38 nM(EC50)		
Ganetespib	**** 4 nM(IC50)		
17-AAG	**** 5 nM(IC50)		
AUY922			*** 13 nM(IC50)
VER 155008		** 0.5 μM（IC50）	

Note: '*' represents potency. The higher the number of '*' is, the more potent the inhibitor or activator is.

JAK/STAT Signaling Pathway

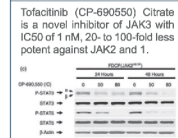


JAK Inhibitors

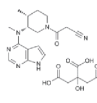
Tofacitinib (CPD-690550) Citrate

A4135

Tofacitinib (CP-690550) Citrate is a novel inhibitor of JAK3 with IC50 of 1 nM, 20- to 100-fold less potent against JAK2 and 1.



Tofacitinib inhibits STAT3 and STAT5 phosphorylation.

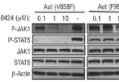


Size: 10 mg, 50 mg.
Soluble in DMSO > 10 mM.

Product Citation:
1. Breast cancer research and treatment (2015): 1 - 14.

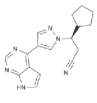
Ruxolitinib (INCB018424)

INCB018424 is the first potent and selective inhibitor of JAK1 and 2 to enter the clinic with IC50 of 3.3 nM and 2.8 nM, respectively. It is > 130-fold selectivity for JAK1 and 2 versus 3.



Aut (V658F) and Aut (F958V) were treated with INCB018424 Inhibitor.

A3012

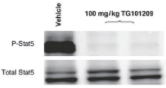


Size: 5 mg, 25 mg.

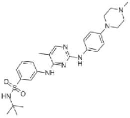
Soluble in DMSO > 10 mM.

TG101209 | A4145

TG101209 is a selective inhibitor of JAK2 with IC50 of 6 nM.



TG101209 inhibits STAT5 phosphorylation.

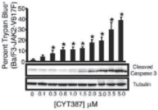


Size: 5 mg, 10 mg, 50 mg, 200 mg.

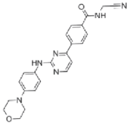
Soluble in DMSO > 10 mM.

CYT387 | A4143

Momelotinib (CYT387) is an ATP-competitive inhibitor of JAK1 and 2 with IC50 of 11 nM and 18 nM, respectively. It has ~10-fold selectivity versus JAK3.



CYT387 induces apoptosis in JAK2 dependent cell.

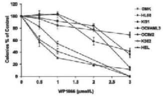


Size: 10 mg, 50 mg, 200 mg.

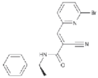
Soluble in DMSO > 10 mM.

WP1066 | A4140

WP1066 is a novel inhibitor of JAK2 and STAT3 with IC50 of 2.30 μM and 2.43 μM in HEL cells, respectively.



WP1066 inhibits cell growth.



Size: 10 mg, 25 mg.

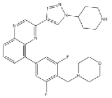
Soluble in DMSO > 10 mM.

NVP-BSK805 | A3675

NVP-BSK805 is a potent and selective ATP-competitive inhibitor of JAK2 with IC50 of 0.5 nM, > 20-fold selectivity towards JAK1, JAK3 and TYK2.

Size:
5 mg, 10 mg, 50 mg, 200 mg.

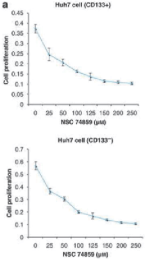
Soluble in DMSO.



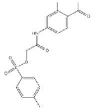
STAT Inhibitors

NSC 74859 (S3I-201) | A8338

S3I-201 is a potent inhibitor of STAT3 DNA-binding activity with IC50 of 86 μM.



Treatment of NSC 74859 inhibits cell growth.



Size: 10 mg, 50 mg, 200 mg.

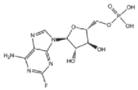
Soluble in DMSO > 10 mM.

Fludarabine Phosphate (Fludara) | A8317

Fludarabine is an inhibitor of STAT1 activation and DNA synthesis.

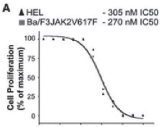
Size: 5 mg, 25 mg.

Soluble in DMSO > 10 mM.

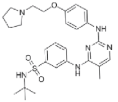


TG101348 (SAR302503) | A4136

TG-101348 (SAR302503) is a selective inhibitor of JAK2 with IC50 of 3 nM which is 35- and 334-fold more selective for JAK2 versus JAK1 and 3.



TG101348 inhibits cell growth.

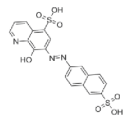


Size:
5 mg, 10 mg, 25 mg, 50 mg.

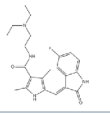
Soluble in DMSO > 10 mM.

JAK/STAT

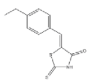
SHP Inhibitor

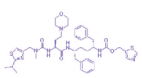
NSC 87877	A4544
NSC-87877 is a potent inhibitor of SHP2 with IC50 of 0.318 ± 0.049 μM. Size: 50 mg. Soluble in DMSO > 10 mM.	

RTK Inhibitor

Sunitinib	B1045
Sunitinib is an oral, multi-targeted and small-molecule inhibitor of RTK. Size: 300 mg, 500 mg, 1 g, 2 g. Soluble in DMSO.	

c-Myc Inhibitor

10058-F4	A1169
10058-F4 is a small-molecule and cell-permeable inhibitor of c-Myc-Max dimerization. Size: 10 mg, 50 mg. Soluble in DMSO > 10 mM.	

Cobicistat (GS-9350)	A4313
Cobicistat is a selective inhibitor of cytochrome P450 (CYP) 3A enzymes with IC50 ranging from 0.03 μM to 0.285 μM. Size: 5 mg, 10 mg, 200 mg. Soluble in DMSO > 10 mM.	

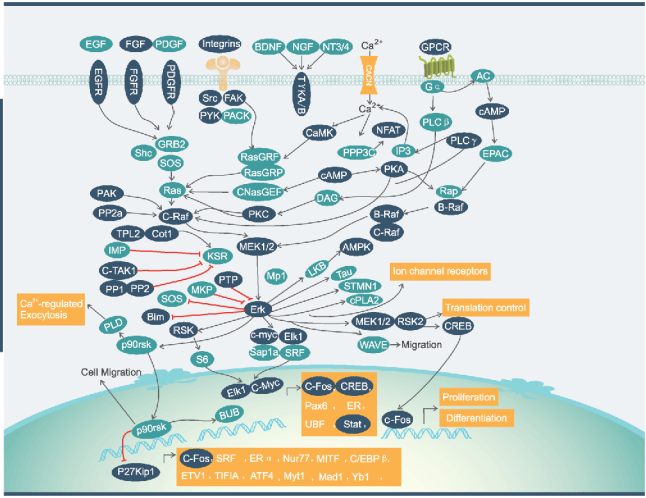
For more targets information, please see our website at "http://www.apexbt.com/research-area/epigenetics/jak.html", or email us: info@apexbt.com.

IC50s compare:

Inhibitors	JAK1	JAK2	Jak2-V617F	JAK3
Tofacitinib	** 112 nM(IC50)	*** 20 nM(IC50)		***** 1 nM(IC50)
Ruxolitinib	**** 3.3 nM(IC50)	**** 2.8 nM(IC50)		
TG101209		**** 6 nM(IC50)		** 169 nM(IC50)
CYT387	*** 11 nM(IC50)	*** 18 nM(IC50)		** 155 nM(IC50)
WP1066		* 2.3 μM(IC50)		
NVP-BSK805	*** 31.63 nM(IC50)	***** 0.5 nM(IC50)	*	*** 18.68 nM(IC50)
TG101348		**** 3 nM(IC50)		

Note: "*" represents potency. The higher the number of "*" is, the more potent the inhibitor or activator is.

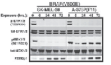
MEK1/2 Signaling Pathway



MEK1/2 Inhibitors

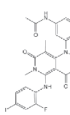
Trametinib(GSK1120212)

Trametinib (GSK1120212) is a highly specific and potent inhibitor of MEK1 and MEK2 with IC50 of 0.92 nM and 1.8 nM, respectively.



GSK1120212 causes sustained inhibition of ERK1/2 phosphorylation, and differential effects on MEK phosphorylation.

A3018

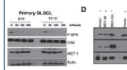


Size:
50 mg, 200 mg, 500 mg.

Soluble in DMSO > 10 mM.

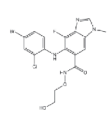
AZD6244 (Selumetinib)

Selumetinib (AZD6244) is a potent and highly selective inhibitor of MEK1 with IC50 of 14 nM.



Treatment of AZD6244 affects pERK and MCT-1 in cell culture.

A8207



Size: 100 mg, 500 mg.

Soluble in DMSO > 10 mM.

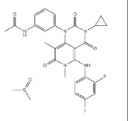
Trametinib DMSO solvate

A3887

Trametinib DMSO solvate is a novel and potent allosteric inhibitor of MEK kinase.

Size: 10 mg, 50 mg, 100 mg, 1 g.

Soluble in DMSO > 10 mM.



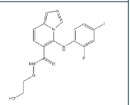
GDC-0623

B1135

GDC-0623 is a potent and ATP-uncompetitive inhibitor of MEK1 with Ki of 0.13 nM.

Size: 5 mg, 25 mg, 100 mg.

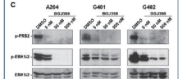
Soluble in DMSO.



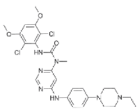
BGJ398

A3014

BGJ398 (NVP-BGJ398) is a potent and selective inhibitor of FGFR for FGFR1, FGFR2 and FGFR3 with IC50 of 0.9 nM, 1.4 nM and 1 nM, respectively. It is > 40-fold selective for FGFR versus FGFR4 and VEGFR2, and has little activity for Abl, Fyn, Kit, Lck and Lyn.



P-FRS2 and p-ERK1/2 in MRT lines were treated with DMSO or NVP-BGJ398.



Size: 5 mg, 10 mg, 200 mg.

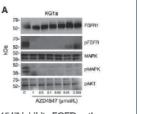
Limited solubility.

FGFR Inhibitors

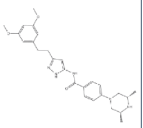
AZD4547

A8350

AZD4547 is a novel and selective inhibitor of FGFR for FGFR1, 2 and 3 with IC50 of 0.2 nM, 2.5 nM and 1.8 nM, respectively. It has weaker activity against FGFR4, VEGFR2, and little activity observed against IGFR, CDK2, and p38.



AZD4547 inhibits FGFR pathway.



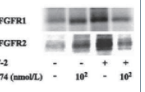
Size:
10 mg, 50 mg, 100 mg.

Soluble in DMSO > 10 mM.

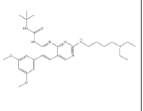
PD 173074

A8253

PD173074 is a potent inhibitor of FGFR1 with IC50 of ~25 nM and also inhibits VEGFR2 with IC50 of 100 - 200 nM, ~1000-fold selective for FGFR1 than PDGFR and c-Src.



FGFR is inhibited by PD173074 treatment.



Size: 10 mg, 50 mg.

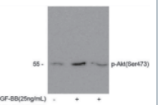
Soluble in DMSO > 10 mM.

PDGFR Inhibitors

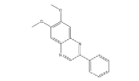
Tyrphostin AG 1296

A2477

Tyrphostin AG 1296 is a selective inhibitor of PDGFR with IC50 of 0.3 μM - 0.5 μM.



Tyrphostin AG 1296 can inhibit the PDGF-BB induced phosphorylation of Akt.



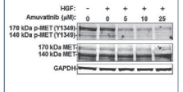
Size: 25 mg, 100 mg.

Limited solubility.

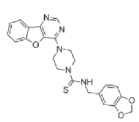
Amuvatinib (MP-470, HPK 56)

A4237

Amuvatinib (MP-470) is a potent and multi-targeted inhibitor of c-Kit, PDGFRα and Flt3 with IC50 of 10 nM, 40 nM and 81 nM, respectively.



Amuvatinib inhibits MET receptor tyrosine kinase.

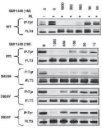


Size:
2 mg, 5 mg, 10 mg, 50 mg.

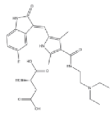
Soluble in DMSO > 10 mM.

Sunitinib malate — A8255

Sunitinib Malate is a multi-targeted inhibitor of RTK for VEGFR2 (Flk-1) and PDGFR β with IC50 of 80 nM and 2 nM, respectively.



Sunitinib inhibits FLT3 phosphorylation.

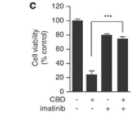


Size: 10 mg, 50 mg.

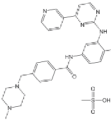
Soluble in DMSO > 10 mM.

Imatinib Mesylate(STI571) — A1805

Imatinib Mesylate (STI571), an orally bioavailability mesylate salt of Imatinib, is a multi-target inhibitor of v-Abl, c-Kit and PDGFR with IC50 of 0.6 μM, 0.1 μM and 0.1 μM, respectively.



Treatment of Imatinib protects against CBD-mediated HSC death activation.



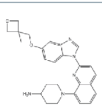
Size: 100 mg.

Soluble in DMSO > 10 mM.

Crenolanib (CP-868596) — A8307

Crenolanib (CP-868596) is a potent and selective inhibitor of PDGFRα and PDGFRβ with Kd of 2.1 nM and 3.2 nM, respectively.

Treatment of Crenolanib in RASMCs inhibits proliferation.



Size: 5 mg, 25 mg.

Soluble in DMSO > 10 mM.

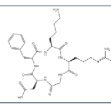
Integrins Inhibitor

Cyclo (-RGDfK) — A8164

Cyclo(-RGDfK) is a potent and selective inhibitor of the αvβ3 integrin.

Size: 1 mg, 5 mg.

Soluble in Water.



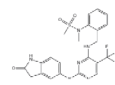
PYK Inhibitor

PF-431396 — A8692

PF-431396 is a potent and highly selective pyrimidine-based inhibitor of both Pyk2 and FAK.

Size: 10 mg, 50 mg, 200 mg.

Soluble in DMSO > 10 mM.



TrKA/B Inhibitor

GW441756 — B2297

GW441756 is a potent, selective inhibitor of TrkA with IC50 of 2 nM.

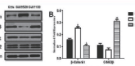
Size: 10 mg, 50 mg.

Soluble in DMSO > 10 mM.

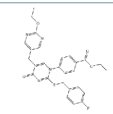
GPCR Antagonist and Inhibitor

GW-1100 — A3452

GW1100 is a selective GPR40 antagonist.



GSK3β expression decreases in the presence of GW9508 and increases upon addition of GW1100.



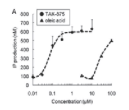
Size: 5 mg, 10 mg, 25 mg, 50 mg.

Soluble in DMSO > 10 mM.

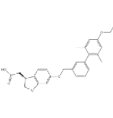
Product Citations:
1. Stem cells and development ja (2014).
2. Biochimie (2015).

TAK-875 — A8339

TAK-875 is a selective agonist of GPR40 with EC50 of 14 nM, and 400-fold more potent than oleic acid.



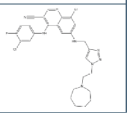
Treatment of TAK-875 induces IP production.



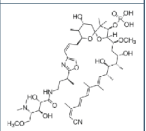
Size: 5 mg, 10 mg, 50 mg.

Soluble in DMSO > 10 mM.

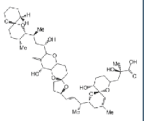
COT Inhibitor

Cot inhibitor-1	A3328
Cot inhibitor-1 is a COT and Tpl2 inhibitor. Size: 5 mg, 25 mg, 100 mg. Soluble in DMSO.	

PP1 Inhibitor

Calyculin A	A4533
Calyculin A is a potent and selective cell-permeable inhibitor of PP1 (IC50 = 0.3 - 0.7 nM) and PP2A (IC50 = 0.5 - 1 nM). Size: 100 µg. Soluble in DMSO > 10 mM.	

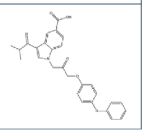
PP2 Inhibitor

Okadaic acid	A4540
Okadaic acid is a potent inhibitor of protein phosphatase 1 and PP2A with IC50 of 19 nM and 0.2 nM, respectively. Size: 25 µg. Soluble in DMSO > 10 mM.	

PTP Inhibitor

TCS 401	A4545
TCS 401 is a selective inhibitor of protein-tyrosine phosphatase 1B (PTP1B) (KI values are 0.29, 59, 560, 1100, > 2000, > 2000 and > 2000 µM for PTP1B, CD45 D1D2, PTPβ, PTPε D1, SHP-1, PTPα D1 and LAR D1D2 respectively). Size: 10 mg. Soluble in DMSO > 10 mM.	

CPLA2 Inhibitor

CAY10650	B1168
CAY10650 is a potent inhibitor of PLA2 with IC50 of 12 nM. Size: 1 g. Soluble in DMSO.	

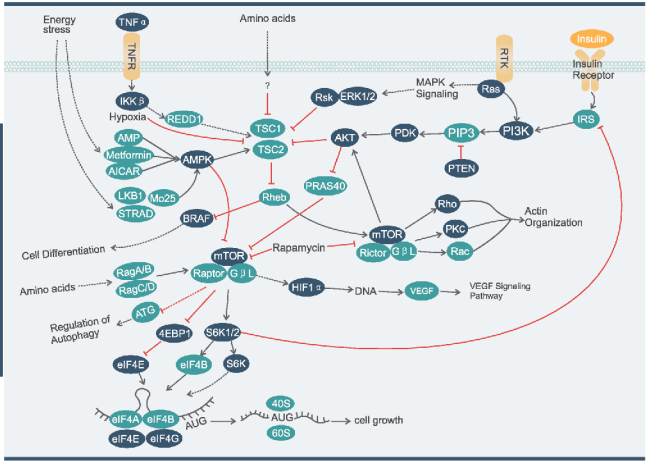
For more targets information, please see our website at "http://www.apexbt.com/research-area/mapk/mek1-2.html", or email us: info@apexbt.com.

IC50s compare:

STAT Inhibitors	MEK1	MEK2
Trametinib	***** 0.92 nM(IC50)	**** 1.8 nM(IC50)
Trametinib DMSO solvate	***** 0.7 nM(IC50)	***** 0.9 nM(IC50)
Selumetinib	*** 14 nM(IC50)	
GDC-0623	***** 0.13 nM(KI)	

Note: "*" represents potency. The higher the number of "*" is, the more potent the inhibitor or activator is.

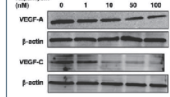
mTOR Signaling Pathway



mTOR Inhibitors

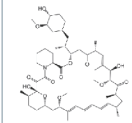
Rapamycin (Sirolimus)

Rapamycin (Sirolimus, AY-22989, WY-090217) is a specific inhibitor of mTOR with IC50 of ~0.1 nM.



VEGF-A and VEGF-C are inhibited by Rapamycin.

A8167

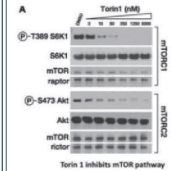


Size: 5 mg, 25 mg, 100 mg.
Soluble in DMSO > 10 mM.

Product Citation:
1.Journal of proteome research (2015).

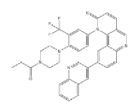
Torin 1

Torin 1 is a potent inhibitor of mTORC1 and mTORC2 with IC50 of 2 nM and 10 nM, respectively.



Torin 1 inhibits mTOR pathway.

A8312

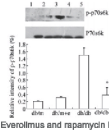


Size: 5 mg, 25 mg.

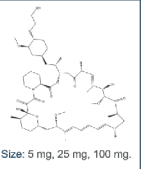
Limited solubility.

Everolimus (RAD001) — A8169

Everolimus (RAD001) is an inhibitor of mTOR for FKBP12 with IC50 of 1.6 - 2.4 nM.



Everolimus and rapamycin blocks the mTOR pathway in kidneys.

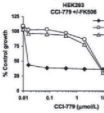


Size: 5 mg, 25 mg, 100 mg.

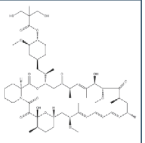
Soluble in DMSO > 10 mM.

Temsirolimus — A8314

Temsirolimus (CCI-779) is a specific inhibitor of mTOR with IC50 of 1.76 μM.



Treatment of Temsirolimus inhibits cell growth.

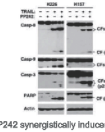


Size: 5 mg, 25 mg.

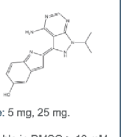
Soluble in DMSO > 10 mM.

PP242 — A8318

PP242 is a selective inhibitor of mTOR with IC50 of 8 nM.



PP242 synergistically induces apoptosis with TRAIL.

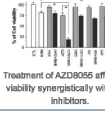


Size: 5 mg, 25 mg.

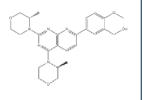
Soluble in DMSO > 10 mM.

AZD8055 — A8214

AZD8055 is a novel and ATP-competitive inhibitor of mTOR with IC50 of 0.8 nM with excellent selectivity (~1,000-fold) against PI3K isoforms, ATM and DNA-PK.



Treatment of AZD8055 affects cell viability synergistically with other inhibitors.

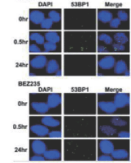


Size: 5 mg, 25 mg, 100 mg.

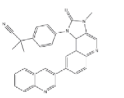
Soluble in DMSO > 10 mM.

BEZ235 (NVP-BEZ235) — A8246

BEZ235 is a dual and ATP-competitive inhibitor of PI3K and mTOR for p110α, γ, δ, β and mTOR with IC50 of 4 nM, 5 nM, 7 nM, 5 nM and 6 nM, respectively.



Treatment of BEZ235 inhibits DSB repair.



Size: 100 mg, 500 mg.

Soluble in DMSO > 10 mM.

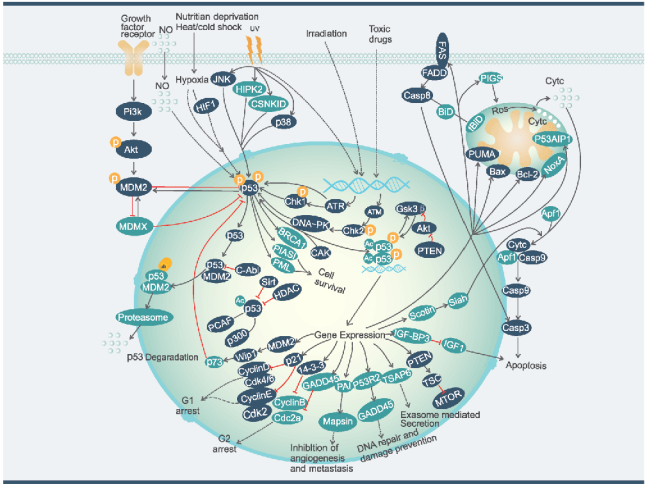
For more targets information, please see our website at "http://www.apexbt.com/research-area/pi3k-akt-signaling/mtor-signaling.html", or email us: info@apexbt.com.

IC50s compare:

Inhibitors	Pan-mTOR	mTOR1	mTOR2
Rapamycin	***** 0.1 nM(IC50)		
Everolimus	**** 1.6-2.4 nM(IC50)		
Torin 1		**** 2 nM(IC50)	**** 10 nM(IC50)
PP242	**** 8 nM(IC50)		
Temsirolimus	** 1.76 μM(IC50)		
AZD8055	***** 0.8 nM(IC50)		
BEZ235	**** 6 nM(IC50)		

Note: "*" represents potency. The higher the number of "*" is, the more potent the inhibitor or activator is.

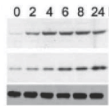
p53 Signaling Pathway



p53 Inhibitor

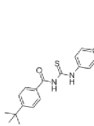
Tenovin-1

Tenovin-1 is an inhibitor of MDM2-mediated p53 degradation.



Treatment of Tenovin-1 increases p53 and p21 levels.

A4203



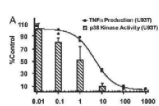
Size:
25 mg, 50 mg, 100 mg.

Soluble in DMSO > 10 mM.

p38 Inhibitors

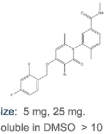
PH-797804

PH-797804 is a novel pyridinone inhibitor of p38α with IC50 of 26 nM; 4-fold more selective versus p38β.



PH-797804 inhibits P38 kinase.

A8308

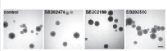


Size: 5 mg, 25 mg.
Soluble in DMSO > 10 mM.
Product Citation:
1. Breast cancer research and treatment (2015): 1 - 14.

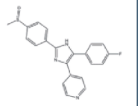
SB 203580

A8254

SB 203580 is a p38 inhibitor of MAPK with IC50 of 0.3 - 0.5 μM, 10-fold less sensitive to SAPK3 (106T) and SAPK4 (106T) and blocks PKB phosphorylation with IC50 of 3 - 5 μM.



Treatment of increases the number and size of neurospheres culture.



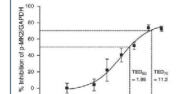
Size: 1 mg, 10 mg, 50 mg.

Soluble in DMSO > 10 mM.

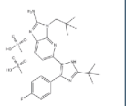
LY2228820

A5566

LY2228820 is a novel and potent inhibitor of p38 MAPK with IC50 of 7 nM.



Treatment of LY2228820 inhibits phosphorylation of MAPK-K2.



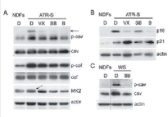
Size: 5 mg, 25 mg, 100 mg.

Soluble in DMSO > 10 mM.

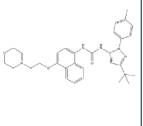
BIRB 796

A5639

BIRB 796 (Doramapimod) is a highly selective p38α inhibitor of MAPK with Kd of 0.1 nM, 330-fold greater selectivity versus JNK2, weak inhibition for c-Raf, Fyn and Lck, insignificant inhibition for ERK-1, SYK, IKK2, ZAP-70, EGFR, HER2, PKA, PKC and PKCα/β/γ.



BIRB 796 affects p38 signaling pathway.



Size: 5 mg, 10 mg, 50 mg.

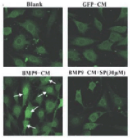
Soluble in DMSO > 10 mM.

JNK Inhibitors

SP600125

A4604

SP600125 is a broad-spectrum inhibitor of JNK for JNK1, 2 and 3 with IC50 of 40 nM, 40 nM and 90 nM, respectively.



Treatment of SP600125 inhibits JNK.

Size: 10 mg, 50 mg.

Soluble in DMSO > 10 mM.

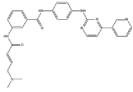
JNK-IN-7

A3519

JNK-IN-7 is a selective JNK inhibitor with IC50 of 1.54 nM, 1.99 nM and 0.75 nM for JNK1, 2 and 3, respectively.

Size:
5 mg, 10 mg, 50 mg, 100 mg.

Soluble in DMSO.



c-Abl Activator

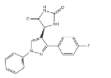
DPH

A3373

DPH is a c-Abl activator.

Size: 10 mg, 50 mg, 200 mg.

Soluble in DMSO.

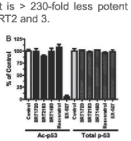


SIRT Activator

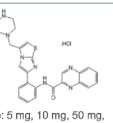
SRT1720 HCl

A4180

SRT1720 is a selective activator of SIRT1 with EC50 of 0.16 μM, but is > 230-fold less potent for SIRT2 and 3.



Effect of SRT1720, SRT2183, SRT1460 and Resveratrol on SIRT1.



Size: 5 mg, 10 mg, 50 mg, 200 mg.

Soluble in DMSO > 10 mM.

Product Citation:
1. Analytical chemistry (2015).

p53

p300 Inhibitor

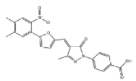
C646

C646 is an inhibitor of p300 with Ki of 400 nM.

Size: 10 mg, 50 mg.

Soluble in DMSO > 10 mM.

B1577



WIP1 Inhibitor

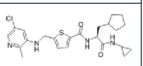
GSK 2830371

GSK2830371 is an orally active and allosteric inhibitor of WIP1 phosphatase with IC50 of 6 nM.

Size: 10 mg, 50 mg, 200 mg.

Soluble in DMSO.

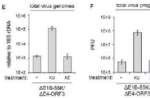
B1169



ATR Inhibitors

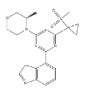
AZ20

AZ20 is a potent and selective inhibitor of ATR kinase with IC50 of 5 nM.



MRN senses replicates virus genomes and recruits ATM.

A3210



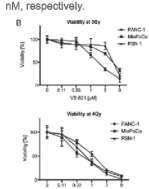
Size: 5 mg, 10 mg, 50 mg.

Soluble in DMSO > 10 mM.

Product Citation:
1. Cell 162.5 (2015): 987 - 1002.

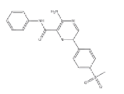
VE-821

VE-821 is a potent, selective and ATP competitive inhibitor of ATR with Ki and IC50 of 13 nM and 26 nM, respectively.



Treatment of VE-821 decreases cell viability.

A2521

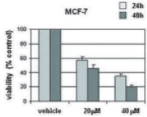


Size: 5 mg, 25 mg, 100 mg.

Soluble in DMSO > 10 mM.

KU 55933

KU 55933 (ATM Kinase Inhibitor) is a potent and specific inhibitor of ATM with IC50 and Ki of 12.9 nM and 2.2 nM, and is highly selective for ATM as compared to DNA-PK, PI3K, PI4K, ATR and mTOR.



Treatment of KU 55933 causes cell death.

A4605

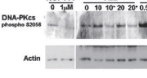
Size: 10 mg.

Soluble in DMSO > 10 mM.

DNA-PK Inhibitor

NU7441 (KU-57788)

NU7441 (KU-57788) is a highly potent and selective inhibitor of DNA-PK with IC50 of 14 nM and also inhibits PI3K with IC50 of 5 μM.



NU7441 inhibits DNA-PK phosphorylation.

A8315

Size: 5 mg, 25 mg.

Soluble in DMSO > 10 mM.

PTEN Inhibitor

VO-Ohpic trihydrate

VO-Ohpic is a highly selective small-molecule inhibitor of PTEN with IC50 of 35 nM.

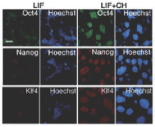
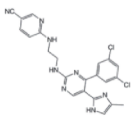
Size: 10 mg, 25 mg.

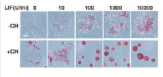
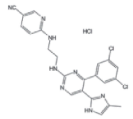
Soluble in DMSO > 10 mM.

A3923

H_2O H_2O H_2O

GSK3β Inhibitors

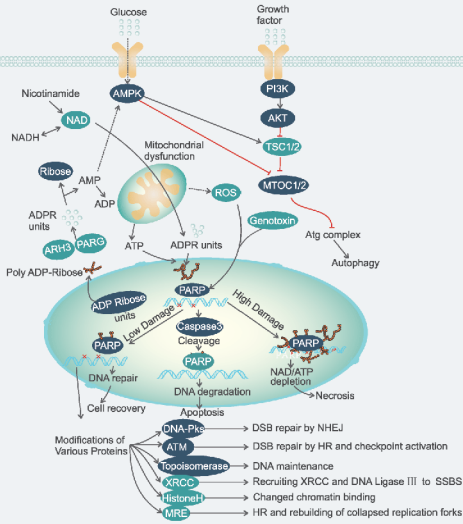
CHIR-99021 (CT99021)	A3011
CHIR-99021 (CT99021) is an inhibitor of GSK3α and GSK3β with IC50 of 10 nM and 6.7 nM, respectively. It has > 500-fold selectivity for GSK-3 versus its closest homologs CDC2 and ERK2, as well as other protein kinases.  LIF and CHIR-99021 maintain stem cell property.	 Size: 5 mg, 25 mg, 100 mg. Soluble in DMSO.

CHIR-99021 (CT99021) HCl	A8396
CHIR-99021 (CT99021) HCl, hydrochloride of CHIR-99021, is an inhibitor of GSK3α and GSK3 β with IC50 of 10 nM and 6.7 nM, respectively.  LIF and CHIR-99021 maintain stem cell property.	 Size: 2 mg, 5 mg, 100 mg. Soluble in DMSO > 10 mM.

- **Akt** **59**
- **PI3K** **57**
- **MDM2** **2**
- **HDAC** **31**
- **cyclinE+cdk2** **18**
- **CHK1** **2**
- **ATM** **2**
- **mTOR** **47**
- **FAS** **13**
- **Caspase** **11**
- **Bax** **10**
- **Bcl-2** **9**

For more targets information, please see our website at "http://www.apexbt.com/research-area/apoptosis/p53.html", or email us: info@apexbt.com.

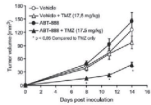
PARP Signaling Pathway



PARP Inhibitors

ABT-888 (Veliparib)

Veliparib (ABT-888) is a potent inhibitor of PARP1 and 2 with Ki of 5.2 nM and 2.9 nM, respectively.



ABT-888 enhances the antitumor activity of temozolomide.

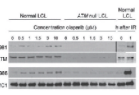
A3002

Size: 5 mg, 10 mg, 50 mg, 200 mg.

Soluble in DMSO > 10 mM.

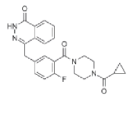
Olaparib (AZD2281, Ku-0059436)

Olaparib (AZD2281, KU0059436) is a potent inhibitor of PARP1 and 2 with IC50 of 5 and 1 nM, respectively.



Treatment of Olaparib induces ATM and SMC1 phosphorylation.

A4154

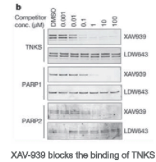


Size:
10 mg, 100 mg, 500 mg.

Soluble in DMSO > 10 mM.

XAV-939

XAV-939 is an inhibitor of RARP5a and 5b (TNKS1/2) with IC50 of 11 nM and 4 nM, respectively.



XAV-939 blocks the binding of TNKS and PARP1/2.

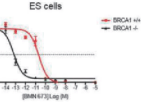
A1877

Size: 5 mg, 25 mg, 100 mg.

Soluble in DMSO > 10 mM.

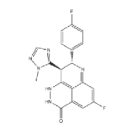
BMN 673

BMN673 is a potent and selective inhibitor of PARP1 and 2 with Ki of 1.2 and 0.9 nM, respectively.



BCRZ1 $^{-/-}$ cells are sensitive to BMN673 treatment.

A4153

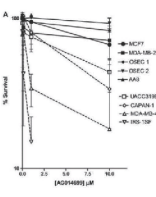


Size: 10 mg, 50 mg.

Soluble in DMSO > 10 mM.

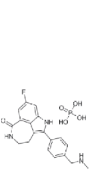
Rucaparib (AG-014699,PF-01367338)

Rucaparib (AG-014699, PF-01367338) is an inhibitor of PARP1 with Ki of 1.4 nM.



Treatment of AG-014699 reduces cell survival.

A4156

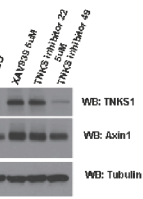


Size: 5 mg, 10 mg, 50 mg, 200 mg.

Soluble in DMSO > 10 mM.

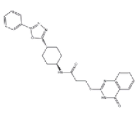
Tankyrase Inhibitors (TNKS) 22

Tankyrase Inhibitors (TNKS) 22 is a potent, selective and orally bioavailable inhibitor of tankyrase with IC50 of 0.1 nM.



Tankyrase Inhibitors 22 performs as good as previously reported XAV939.

A8600

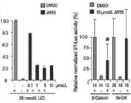


Size: 100 mg.

PARP

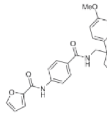
JW 55

JW 55 is an inhibitor of RARP5a and 5b. JW55 decreases auto-PARsylation of RARP5a and 5b in vitro with IC50 of 1.9 μM and 830 nM, respectively.



JWSS inhibits xanonical Wnt pathway.

A4529

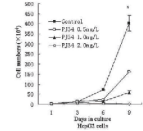


Size: 10 mg, 50 mg.

Soluble in DMSO > 10 mM.

PJ34

PJ34 is a novel, potent and specific inhibitor of PARP with EC50 of 20 nM.



PJ34 inhibits HepG2 cell growth.

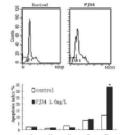
A3729

Size: 10 mg, 50 mg.

Soluble in DMSO > 10 mM.

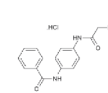
PJ34 hydrochloride

PJ34 is a novel, potent and specific inhibitor of PARP with EC50 of 20 nM.



PJ34 induces HepG2 cell apoptosis.

A4159



Size: 5 mg, 10 mg, 50 mg.

Soluble in DMSO > 10 mM.

Topoisomerase Inhibitors

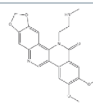
Genz-644282

Genz-644282 is a non-camptothecin inhibitor of topoisomerase I with IC50 of 1.2 nM.

Size:
5 mg, 10 mg, 25 mg, 50 mg.

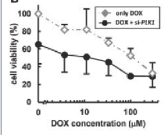
Soluble in DMSO.

A3434



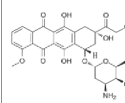
Doxorubicin

Doxorubicin (Adriamycin) is an antibiotic agent and inhibitor of DNA topoisomerase II, it is also an inducer of DNA damage and apoptosis.



Cells incubated with DOX-containing medium effects the viability.

A3966

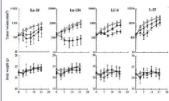


Size: 10 mg, 25 mg.

Soluble in DMSO.

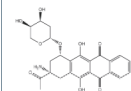
Amrubicin

Amrubicin is an inhibitor of Topoisomerase II Amrubicin.



Effect of Amrubicin and doxorubicin on cancer cell lines.

A8227



Size: 1 mg, 5 mg.

Soluble in Chloroform.

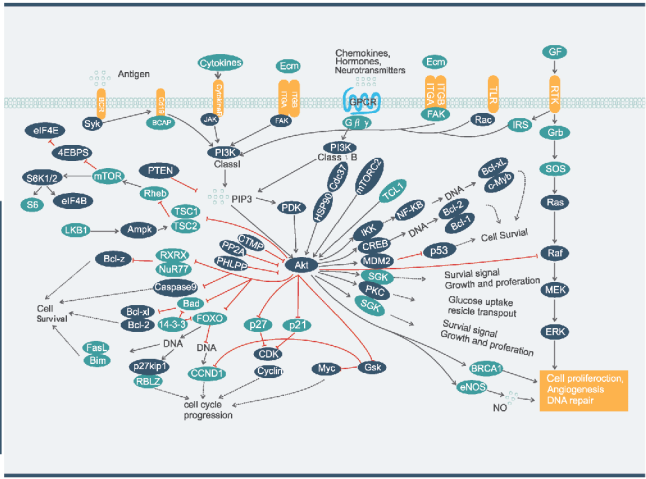
For more targets information, please see our website at "http://www.apexbt.com/research-area/epigenetics/parp.html", or email us: info@apexbt.com.

IC50s compare:

Inhibitors	PARP	PARP1	PARP2	TNKS1	TNKS2
Veliparib		★★★★ 5.2 nM(Ki)	★★★★ 2.9 nM(Ki)		
XAV-939				★★★ 11 nM(IC50)	★★★★ 4 nM(IC50)
PJ34 hydrochloride	★★★ 11 nM(IC50)				
Rucaparib		★★★★ 1.4 nM(Ki)			
Olaparib		★★★★ 5 nM(IC50)	★★★★★ 1 nM(IC50)		
BMN 673		★★★★ 1.2 nM(Ki)	★★★★★ 0.9 nM(Ki)		
TNKS 22					★★★★★ 0.1 nM(IC50)
JW 55				★ 1.9 μM(IC50)	★★ 0.83 μM(IC50)
PJ34		★★★ 20 nM(IC50)			

Note: "★" represents potency. The higher the number of "★" is, the more potent the inhibitor or activator is.

PI3K Signaling Pathway

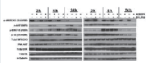


PI3K

PI3K Inhibitors

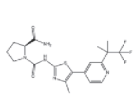
BYL-719

BYL719 is a potent and selective inhibitor of PI3Kα with IC50 of 5 nM.



BYL719 inhibits PI3K pathways.

A8346

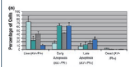


Size: 5 mg, 20 mg, 100 mg.

Soluble in DMSO > 10 mM.

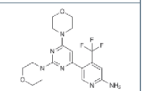
BKM120

BKM120 is a selective PI3K inhibitor of p110α, β, δ and γ with IC50 of 52 nM, 166 nM, 116 nM and 262 nM, respectively.



Stage of apoptosis.

A3015



Size: 5 mg, 10 mg, 100 mg.

Soluble in DMSO > 10 mM.

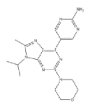
VS-5584 (SB2343)

VS-5584 (SB2343) is a potent and selective inhibitor of PI3K and mTOR with IC50 of 2.6 - 21 nM and 3.4 nM, respectively.

Size: 10 mg, 50 mg.

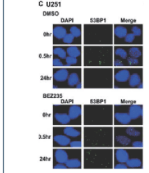
Soluble in DMSO > 10 mM.

A3927



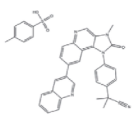
BEZ235 Tosylate

BEZ235 is an imidazoquinoline derivative inhibiting both PI3K and mTOR kinases with low nanomolar IC50s.



Treatment of BEZ235 inhibits DSB repair.

A3238



Size: 25 mg, 100 mg, 200 mg, 1 g.

Soluble in DMSO.

Product Citation:
1. Sci Signal. 2014 Dec 23.

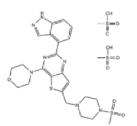
GDC-0941 dimethanesulfonate

GDC-0941 dimethanesulfonate is an orally bioavailable and selective inhibitor of class I PI3K with IC50 of 15 nM, 185 nM, 7 nM and 224 nM for PI3Kα, β, δ and γ, respectively.

Size: 25 mg, 200 mg, 500 mg.

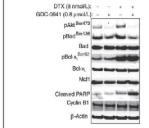
Soluble in DMSO.

A3432



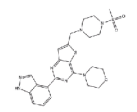
GDC-0941

GDC-0941 is a potent inhibitor of PI3Kα and δ with IC50 of 3 nM, with modest selectivity against p110β (11-fold) and p110γ (25-fold).



Effect of GDC-0941 on Bcl-2 family protein and apoptosis.

A8210



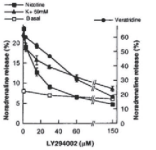
Size: 10 mg, 50 mg, 200 mg.

Soluble in DMSO > 10 mM.

Product Citation:
1. Cellular and Molecular Life Sciences (2015): 1 - 9.

LY 294002

LY294002 is an inhibitor of PI3K α, δ and β with IC50 of 0.5 μM, 0.57 μM and 0.97 μM, respectively.



Treatment of LY294002 inhibits noradrenaline secreation.

A8250

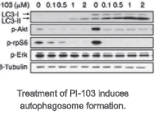
Size: 5 mg, 25 mg.

Soluble in DMSO > 10 mM.

Product Citation:
1. Breast cancer research and treatment (2015): 1 - 14. PMID: 25701119.

PI-103

PI-103 is a multi-targeted inhibitor of PI3K for p110α, β, δ and γ with IC50 of 2 nM, 3 nM, 3 nM and 15 nM, respectively. It is less potent to mTOR and DNA-PK with IC50 of 30 nM and 23 nM, respectively.



Treatment of PI-103 induces autophegosome formation.

A2067

Size: 5 mg, 25 mg, 100 mg.

Soluble in DMSO > 10 mM.

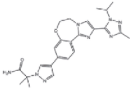
GDC-0032

GDC-0032 is a potent and next-generation inhibitor of β isoform-sparing PI3K with IC50 of 0.29 nM, 0.12 nM and 0.97nM for PI3Kα, δ and γ, respectively.

Size:
5 mg, 10 mg, 25 mg, 50 mg.

Soluble in DMSO.

B1047

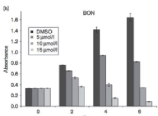


PI3K

Akt Inhibitors

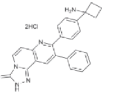
MK-2206 dihydrochloride

MK-2206 dihydrochloride is a highly selective inhibitor of Akt1, 2 and 3 with IC50 of 8 nM, 12 nM and 65 nM, respectively.



MK-2206 treatment exerts an anti-proliferative effect in two carcinoid cell lines.

A3010



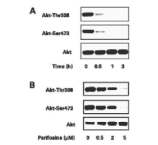
Size:
10 mg, 100 mg, 500 mg.

Soluble in DMSO > 10 mM.

Product Citations:
1. Sci Signal. 2014 Dec 23.
2. Name: Frontiers in Physiology 6.8 (2015).

Perifosine

Perifosine (KRX-0401) is a novel inhibitor of Akt with IC50 of 4.7 μM.



Perifosine inhibits Akt phosphorylation.

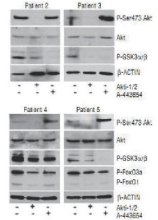
A8309

Size: Size: 5 mg, 25 mg.

Limited solubility.

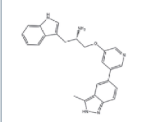
A-443654

A-443654 is a potent and selective inhibitor of Akt1 with Ki of 160 pM.



A-443654 reduces the phosphorylation of GSK3α/β and Fox1/FoxO3a.

A3135



Size: 5 mg.

Soluble in DMSO.

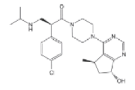
GDC-0068 (RG7440)

GDC-0068 is a highly selective inhibitor of Akt for Akt1, 2 and 3 with IC50 of 5 nM, 18 nM and 8 nM, respectively, and 620-fold selectivity over PKA.

Size:
5 mg, 50 mg, 100 mg, 200 mg.

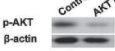
Soluble in DMSO > 10 mM.

A3006



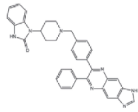
AKT inhibitor VIII

AKT inhibitor VIII is a potent and selective allosteric inhibitor of Akt kinase with IC50 of 58 nM, 210 nM and 2119 nM, for Akt1, 2 and 3, respectively.



Pretreatment with AKT inhibitor VIII causes downregulation of p-Akt.

A3149

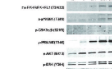


Size: 10 mg, 25 mg.
Soluble in DMSO.

Product Citation:
1. Nature Cell Biology (2015). 2015.May 317(5)627 -38.

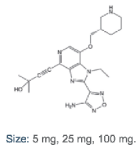
GSK690693

GSK690693 is a pan-Akt inhibitor targeting Akt1, 2 and 3 with IC50 of 2 nM, 13 nM and 9 nM, respectively.



GSK690693 inhibits the phosphorylation of FXHR/FXHRL1, p70S6K, GSK3α/β and PRAS40

A5072



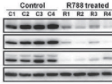
Size: 5 mg, 25 mg, 100 mg.

Soluble in DMSO > 10 mM.

Syk Inhibitors

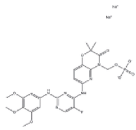
R788

R788 (Fostamatinib) disodium, a prodrug of the active metabolite R406, is an inhibitor of Syk with IC50 of 41 nM.



Treatment of R788 inhibits Syk and its downstream targets.

A8332



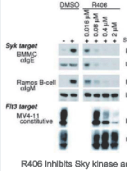
Size: 10 mg, 50 mg, 200 mg.

Limited solubility.

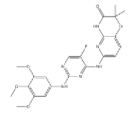
R406 (free base)

A5880

R406 (free base) is a potent inhibitor of Syk with IC50 of 41 nM.



R406 inhibits Syk kinase activity.



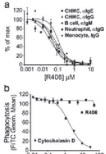
Size: 5 mg, 25 mg, 100 mg.

Soluble in DMSO > 10 mM.

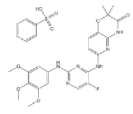
R406

A8546

R406 is a potent inhibitor of Syk with IC50 of 41 nM.



R406 inhibits Syk kinase pathway.



Size: 2 mg, 10 mg.

Soluble in DMSO > 10 mM.

Rac Inhibitor

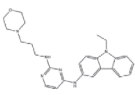
EHop-016

B2219

EHop-016 is a specific inhibitor of Rac GTPase with IC50 of 1.1 μM for Rac1.

Size: 10 mg, 25 mg.

Soluble in DMSO > 10 mM.



AMPK Inhibitor

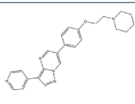
Dorsomorphin

B3252

Dorsomorphin is a cell-permeable, reversible and ATP-competitive inhibitor of AMPK with Ki of 109 nM.

Size: 1 g.

Soluble in DMSO.



PP2A Inhibitor

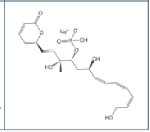
Fostriecin sodium salt

A4536

Fostriecin sodium salt is a potent inhibitor of PP2A and PP4 with IC50 of 1.5 nM and 3 nM, respectively.

Size: 50 μg.

Soluble to 100 mM in sterile water.



CREB Inhibitor

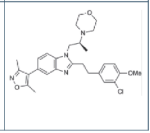
SGC-CBP30

A4491

SGC-CBP30 is a potent inhibitor of CREBBP and EP300 with IC50 of 21 nM and 38 nM, respectively.

Size: 10 mg, 50 mg.

Soluble in DMSO > 10 mM.



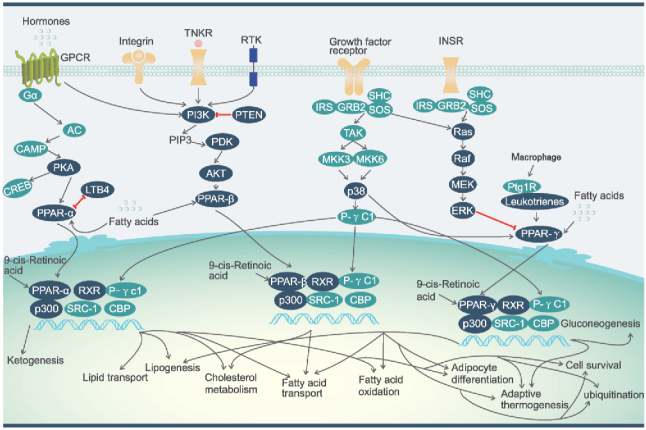
For more targets information, please see our website at "http://www.apexbt.com/research-area/pi3k-akt-signaling/pi3k-inhibitors.html", or email us: info@apexbt.com.

IC50s compare:

Inhibitors	Pan-PI3K	PI3Kα	PI3Kβ	PI3Kγ	PI3Kδ
BYL-719		★★★★ 5 nM(IC50)			
VS-5584		★★★★ 2.6 nM(IC50)	★★★ 21 nM(IC50)	★★★★ 3 nM(IC50)	★★★★ 2.7 nM(IC50)
GDC-0941		★★★★ 3 nM(IC50)	★★★ 33 nM(IC50)	★★★ 75 nM(IC50)	★★★★ 3 nM(IC50)
BEZ235 Tosylate	*				
BKM120		★★★ (IC50 = 52 nM)	★★ 166 nM(IC50)	★★ 262 nM(IC50)	
LY 294002		★★★★★ 0.5 nM(IC50)	★★★★★ 0.97 nM(IC50)		★★★★★ 0.57 nM(IC50)
PI-103		★★★★ 2 nM(IC50)	★★★★ 3 nM(IC50)	★★★ 15 nM(IC50)	★★★★ 3 nM(IC50)
GDC-0032		★★★★★ 0.29 nM(IC50)		★★★★★ 0.97 nM(IC50)	★★★★★ 0.12 nM(IC50)

Note: "★" represents potency. The higher the number of "★" is, the more potent the inhibitor or activator is.

PPAR Signaling Pathway



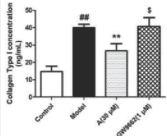
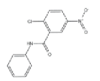
PPARα Inhibitor

WY-14643 (Pirinixic Acid)	A4305
WY-14643 is a highly potent agonist of PPARα with IC50 of 10.11 μM. **Size:** 50 mg, 250 mg. Soluble in DMSO > 10 mM.	

PPARβ Inhibitor

GW501516	A4309
GW501516 is a selective and potent agonist of PPARβ with EC50 of 1.1 nM. **Size:** 5 mg, 250 mg, 100 mg. Soluble in DMSO.	

PPARγ Antagonists

GW9662	A4300
GW9662 is a selective, irreversible and effective antagonist of PPARγ with IC50 of 3.3 μM.  GW9662 can significantly increase the content of Collagen type I.	 **Size:** 10 mg, 25 mg, 50 mg. Soluble in DMSO > 10 mM.

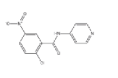
T0070907

A4301

T0070907 is a potent and selective antagonist of the human PPARγ with IC50 of 1 nM.

Size:
5 mg, 10 mg, 25 mg, 50 mg.

Soluble in DMSO > 10 mM.



PPARδ Agonist

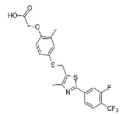
GW0742

A4307

GW0742 is a selective agonist of PPARδ with EC50 of 1.1 nM.

Size: 10 mg, 50 mg.

Soluble in DMSO > 10 mM.

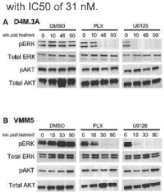


Raf Inhibitors

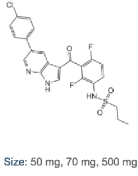
Vemurafenib (PLX4032, RG7204)

A3004

Vemurafenib is a novel and potent inhibitor of B-Raf V600E with IC50 of 31 nM.



PLX4032 decreases pERK levels and inhibits growth of D4M cells.



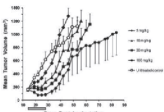
Size: 50 mg, 70 mg, 500 mg.

Soluble in DMSO > 10 mM.

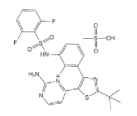
Dabrafenib Mesylate (GSK-2118436)

A3347

GSK2118436 is a selective B-Raf V600E inhibitor.



Treatment of Dabrafenib in Colo 205 tumor xenografts.



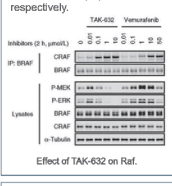
Size:
10 mg, 50 mg, 100 mg.

Soluble in DMSO.

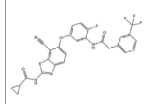
TAK-632

A8226

TAK-632 is a potent inhibitor of Raf with IC50 of 8.3 nM and 1.4 nM for B-Raf (wt) and C-Raf, respectively.



Effect of TAK-632 on Raf.



Size: 5 mg, 10 mg, 25 mg, 50 mg, 100 mg.

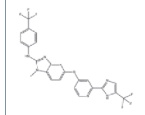
Soluble in DMSO > 10 mM.

RAF265

A8313

RAF265 (CHIR-265) is a potent and selective inhibitor of C-Raf, B-Raf and B-Raf V600E with IC50 of 3 - 60 nM.

RAF265 treatment inhibits MEK phosphorylation.



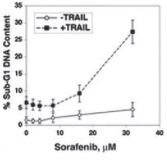
Size: 5 mg, 25 mg.

Soluble in DMSO > 10 mM.

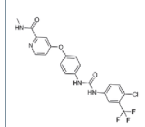
Sorafenib

A3009

Sorafenib is a multikinase inhibitor of Raf-1, B-Raf and VEGFR-2 with IC50 of 6 nM, 22 nM and 90 nM, respectively.



Sorafenib treatment in the presence of TRAIL.



Size:
5 mg, 50 mg, 500 mg.

Soluble in DMSO > 10 mM.

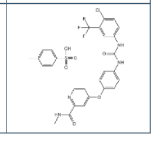
Sorafenib Tosylate

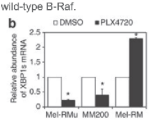
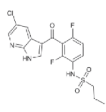
A8245

Sorafenib Tosylate (Bay 43-9006) is a multikinase inhibitor of Raf-1, B-Raf and VEGFR-2 with IC50 of 6 nM, 22 nM and 90 nM, respectively.

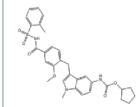
Size: 1 g, 10 g.

Soluble in DMSO > 10 mM.

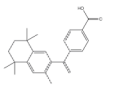


PLX-4720	A3016
PLX-4720 is a potent and selective inhibitor of B-Raf V600E with IC50 of 13 nM, equally potent to c-Raf-1 (Y340D and Y341D mutations), 10-fold selectivity for B-Raf V600E than wild-type B-Raf.  PLX4720 (3 μM) alters the expression of XBP1s mRNA.	 Size: 10 mg, 25 mg, 100 mg. Soluble in DMSO > 10 mM.

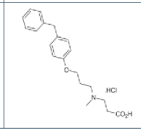
Leukotrienes Agonist

Zafirlukast	B2068
Zafirlukast is a leukotriene receptor antagonist (LTRA). Size: 50 mg, 5 g. Soluble in DMSO > 10 mM.	

RXR Agonist

RXR Agonist	A8380
Bexarotene is a selective RXR agonist used as an antineoplastic. Size: 10 mg, 100 mg. Soluble in DMSO > 10 mM.	

LTB4 Inhibitor

GW0742	A4307
SC-57461A is a selective inhibitor of human recombinant LTB4 with IC50 of 49 nM. Size: 10 mg, 50 mg. Soluble in DMSO > 10 mM.	

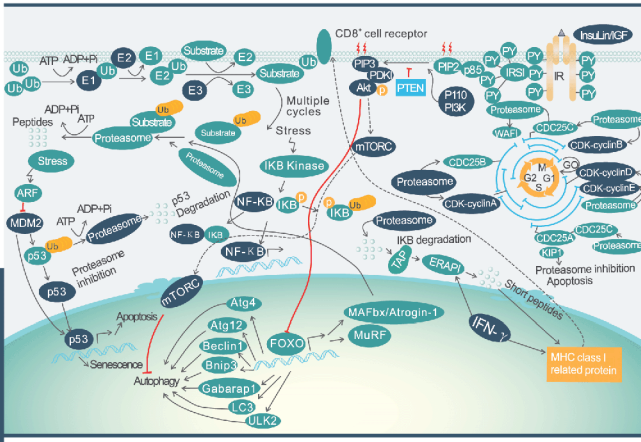
For more targets information, please see our website at "http://www.apexbt.com/research-area/metabolism/ppar.html", or email us: info@apexbt.com.

IC50s and EC50s compare:

Inhibitors	PPARα	PPARβ	PPARγ	PPARδ
WY-14643	* 10.11 μM(IC50)			
GW501516		**** 1.1 nM(EC50)		
GW9662	*** 32 nM(IC50)		**** 3.3 nM(IC50)	* 2000 nM(IC50)
T0070907			***** 1 nM(IC50)	
GW0742				**** 1.1 nM(EC50)

Note: '*' represents potency. The higher the number of '*' is, the more potent the inhibitor or activator is.

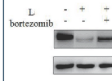
Proteasome Signaling Pathway



Proteasome Inhibitors

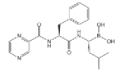
Bortezomib (PS-341)

Bortezomib (PS-341) is a potent inhibitor of 20S proteasome with Ki of 0.6 nM.



Treatment with Bortezomib and L reduce HK2 degradation compared with L alone.

A2614

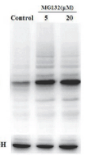


Size: 10 mg, 25 mg, 100 mg, 500 mg.

Soluble in DMSO > 10 mM.

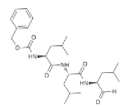
MG-132

MG-132 is an inhibitor of proteasome with IC50 of 100 nM, and also inhibits Calpain with IC50 of 1.2 μM.



MG-132 inhibits the p53 degradation effectively.

A2585



Size: 10 mg, 25 mg, 100 mg, 500 mg.

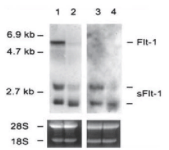
Soluble in DMSO > 10 mM.

Product Citations:

1.Oncotarget, 2014, 5(11): 3728.
2. Molecular plant pathology (2015).

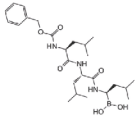
MG-262

MG-262 is a reversible and cell-permeable proteasome inhibitor with IC50 of 122 nM.



Treatment of MG-262 (lane 2 & 4) vs. Control (lane 1 & 3).

A8179

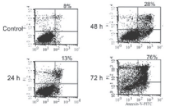


Size: 1 mg, 5 mg.

Soluble in DMSO.

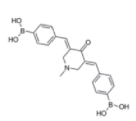
AM 114

AM 114 is a potent small-molecule inhibitor of the proteasome with IC50 of approximately 1 µM.



Treatment of AM 114 induces apoptosis.

A8163



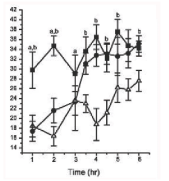
Size: 10 mg, 50 mg.

Limited solubility.

Product Citation:
1. Journal of Genetics and Genomics (2015).

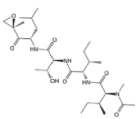
Epoxomicin

Epoxomicin is a selective and irreversible inhibitor of 20S proteasome with IC50 of 4 nM.



Effect of specific pharmacological inhibitors on the recovery of vibration sensitivity in Nematostella vectensis.

A2606



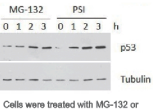
Size: 1 mg, 5 mg, 20 mg.

Soluble in DMSO.

Product Citations:
1. International journal of oncology 46.1 (2015): 395 - 406.
2. Current Protocols in Immunology (2015): 9 - 10.

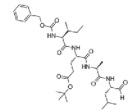
PSI

PSI is an inhibitor of proteasome.



Cells were treated with MG-132 or PSI.

A1900

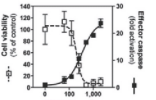


Size: 5 mg.

Soluble in DMSO > 10 mM.

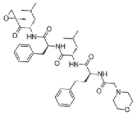
Carfilzomib (PR-171)

Carfilzomib (PR-171) is an irreversible inhibitor of proteasome with IC50 of < 5 nM.



Treatment of PR-171 reduces cell viability.

A1933

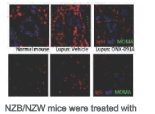


Size: 5 mg, 10 mg, 25 mg, 100 mg.

Soluble in DMSO > 10 mM.

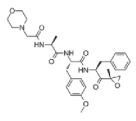
ONX-0914 (PR-957)

ONX-0914 (PR-957) is a potent and selective inhibitor of immunoproteasome with minimal cross-reactivity for the constitutive proteasome.



NZB/NZW mice were treated with ONX 0914.

A4011

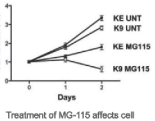


Size: 10 mg, 50 mg, 100 mg, 200 mg.

Soluble in DMSO > 10 mM.

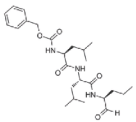
MG-115

MG-115 (Z-Leu-Leu-Nva-H) is a potent and reversible peptide aldehyde inhibitor of proteasome chymotrypsin-like and caspase-like activities.



Treatment of MG-115 affects cell growth.

A2612

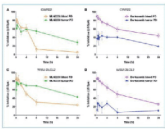


Size: 5 mg, 25 mg, 100 mg.

Soluble in DMSO.

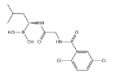
MLN2238

MLN2238 is a potent and reversible inhibitor that inhibits specific β5 site of the 20S proteasome with IC50 of 3.4 nM and Ki of 0.93 nM, respectively.



Blood and tumor proteasome inhibition are induced by MLN2238.

A4008



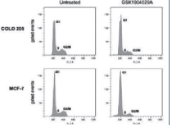
Size: 5 mg, 10 mg, 50 mg, 100 mg.

Soluble in DMSO > 10 mM.

Insulin/IGF Inhibitors

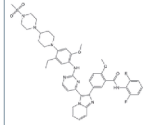
GSK1904529A

GSK1904529A is a selective inhibitor of IGF-1R with IC50 of 27 nM.



Treatment of GSK1904529A induces G1 phase arrest.

A1302



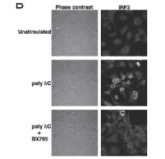
Size: 10 mg, 50 mg.

Soluble in DMSO > 10 mM.

PDK1 Inhibitors

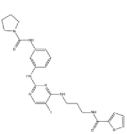
BX795

BX795 is a potent and specific inhibitor of PDK1 with IC50 of 6 nM.



BX795 blocks the nuclear translocation of IRF3.

A8222

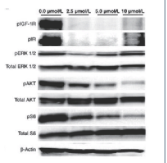


Size: 5 mg, 10 mg, 50 mg, 100 mg.

Soluble in DMSO > 10 mM.

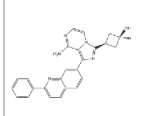
Linsitinib

OSI-906 (Linsitinib) is a selective inhibitor of IGF-1R with IC50 of 35 nM; modestly potent to Insulin receptor with IC50 of 75 nM.



Treatment of Linsitinib inhibits IGF-1R pathway.

A8334



Size: 5 mg, 10 mg, 50 mg.

Soluble in DMSO > 10 mM.

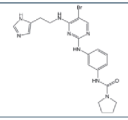
BX-912

BX-912 is a potent and ATP-competitive inhibitor of PDK1 with IC50 of 26 nM.

Size: 5 mg, 25 mg, 100 mg.

Soluble in DMSO > 10 mM.

A2806



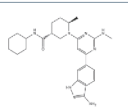
GSK2334470

GSK2334470 is a novel inhibitor of PDK1 with IC50 of 10 nM.

Size: 10 mg, 25 mg, 50 mg.

Soluble in DMSO > 10 mM.

B2174



E1 Inhibitor

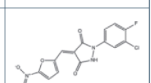
PYZD-4409

PYZD-4409 is a small-molecule inhibitor of E1 with IC50 of 20 μM.

Size: 5 mg, 10 mg, 25 mg, 50 mg, 100 mg.

Soluble in DMSO > 10 mM.

B1244



E2 Inhibitor

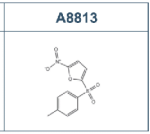
NSC697923

NSC697923 is a selective inhibitor of the E2 ubiquitin (Ub) conjugating enzyme UBE2N (Ubc13).

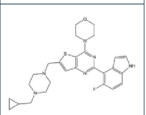
Size: 10 mg, 25 mg.

Soluble in DMSO > 10 mM.

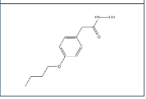
A8813



p110 Inhibitor

PI-3065	B4660
PI-3065 is a small molecule and selective inhibitor of p110δ kinase with Ki and IC50 of 1.5 nM and 5 nM, respectively. Size: 5 mg, 10 mg, 50 mg, 100 mg. Soluble in DMSO.	

IFN Inhibitor

Bufexamac	B1443
Bufexamac is a COX inhibitor for IFN-α release with EC50 of 8.9 μM. Size: 50 mg. Soluble in DMSO > 10 mM.	

for more targets information, please see our website at "http://www.apexbt.com/research-area/proteases/proteasome.html", or email us: info@apexbt.com.

IC50s compare:

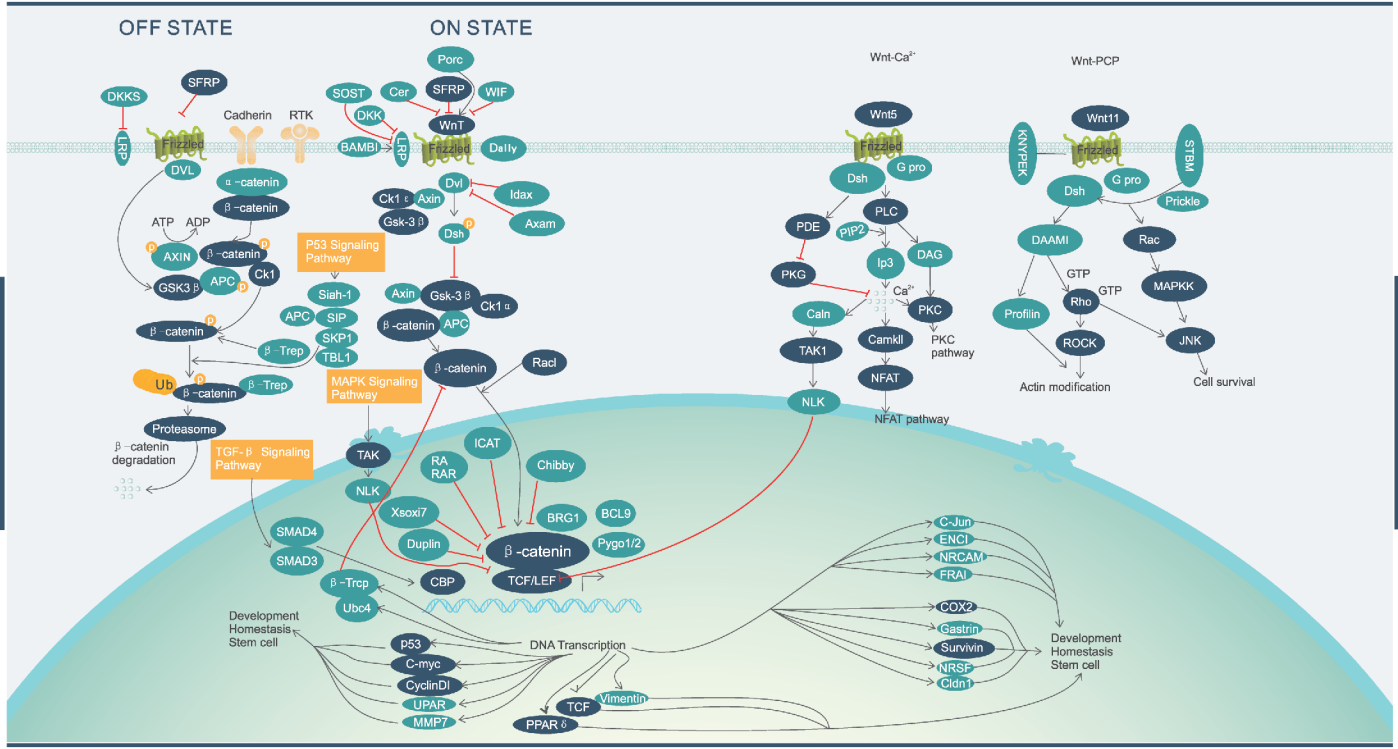
Inhibitors	Proteasome	20s proteasome	Chymotrypsin-like activity of the 20S proteasome	Chymotrypsin-like proteolytic (β5) site of the 20S proteasome	Caspase-like (β1) proteolytic sites proteasome	Trypsin-like (β2) proteolytic sites proteasome	20S proteasome LMP7
MG-132	** 100 nM(IC50)						
Bortezomib		***** 0.6 nM(Ki)					
Epoxomicin		*					
Carfilzomib			**** 5 nM(IC50)				
ONX-0914							**** 10 nM(IC50)
PSI			*				
MG-115				*	*		
MG-262			*				
AM 114			* 1 μM(IC50)				
MLN2238				***** 3.4 nM(IC50) 0.93 nM(Ki)	*** 31 nM(IC50)	* 3.5 μM(IC50)	

Note: "*" represents potency. The higher the number of "*" is, the more potent the inhibitor or activator is.

Wnt Signaling Pathway

Canonical Wnt Signaling Pathway

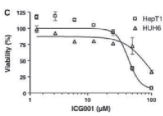
Non-canonical Wnt Signaling Pathway



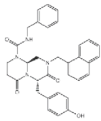
Wnt Inhibitors

ICG 001 — A8217

ICG 001 is an antagonist of Wnt, and specifically binds to element-binding protein (CBP) with IC50 of 3 μM.



ICG 001 reduces dose-dependent the cell viability of HuH6 and HepT1 cells.

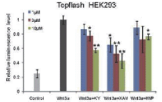


Size: 5 mg, 10 mg, 25 mg, 100 mg.

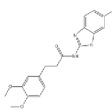
Soluble in DMSO > 10 mM.

KY 02111 — A8213

KY 02111 is a promoter of differentiateon of hPSCs to cardiomyocytes and inhibitor of Wnt signaling.



KY 02111 inhibits canonical Wnt pathway.



Size: 10 mg, 50 mg, 200 mg.

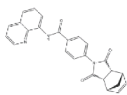
Soluble in DMSO > 10 mM.

IWR-1-endo — B2306

IWR-1-endo is a potent inhibitor of Wnt signaling with IC50 of 180 nM.

Size: 10 mg, 25 mg.

Limited solubility.



SFRP Inhibitor

WAY 316606 — A3932

WAY 316606 is a selective small-molecule inhibitor of SFRP-1 with EC50 of 0.65 μM.

Size:
5 mg, 10 mg, 50 mg, 100 mg.

Soluble in DMSO > 10 mM.

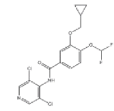
PDE Inhibitors

Roflumilast — A4319

Roflumilast is an orally active and selective inhibitor of PDE4 with IC50 of 0.11 nM.

Size:
5 mg, 10 mg, 25 mg, 50 mg.

Soluble in DMSO > 10 mM.

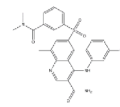


GSK256066 — A4331

GSK256066 is a highly potent and selective inhibitor of PDE4 with IC50 of 3.2 pM.

Size: 10 mg, 50 mg, 200 mg.

Limited solubility.

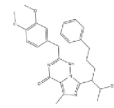


Bay 60-7550 — A3226

Bay 60-7550 is a potent PDE2 inhibitor with IC50 of 2.0 nM (bovine) and 4.7 nM (human), respectively.

Size: 5 mg, 10 mg, 100 mg.

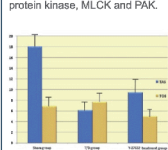
Soluble in DMSO.



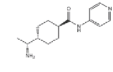
ROCK Inhibitors

Y-27632 — B1293

Y-27632 is a selective inhibitor of ROCK1 (p160ROCK) with Ki of 140 nM, exhibits > 200-fold selectivity over other kinases, including PKC, cAMP-dependent protein kinase, MLCK and PAK.

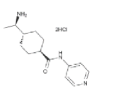


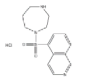
Y-27632 treatment leads to lower mean total oxidant status values compared with the torsion-detorsion (T/D) group.

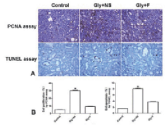


Size: 5 mg, 10 mg, 50 mg, 100 mg.

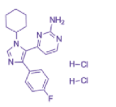
Soluble in DMSO > 10 mM.

Y-27632 dihydrochloride	A3008
Y-27632 2HCl is a selective inhibitor of ROCK1 (p160ROCK) with Ki of 140 nM. Size: 10 mg, 50 mg, 200 mg. Soluble to 100 mM in sterile water.	

Fasudil (HA-1077) HCl	A5734
Fasudil (HA-1077) HCl is a selective inhibitor of ROCK with IC50 of 0.74 μM. Size: 100 mg. Soluble in DMSO > 10 mM.	

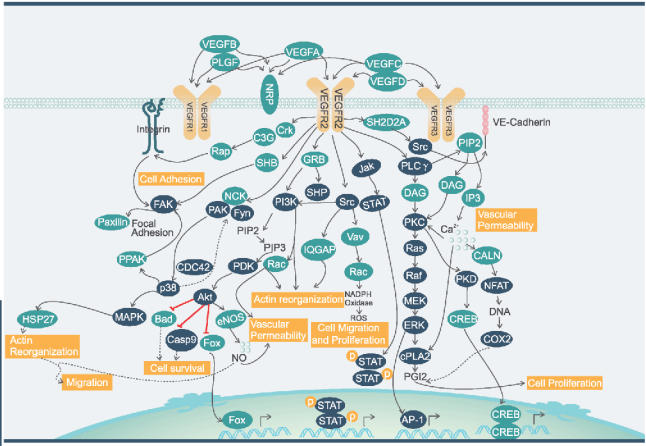
Fasudil	B3523
Fasudil is a potent inhibitor of ROCK-II, PKA, PKG, PKC and MLCK with Ki of 0.33 μM, 1.6 μM, 1.6 μM, 3.3 μM and 36 μM, respectively.  Effects of Fasudil on the kidney cell proliferation and apoptosis.	 Size: 1 g. Soluble in DMSO. Product Citation: 1. Experimental and Molecular Pathology (2015). PMID: 25697583.

CK1 Inhibitor

PF-670462	A3719
PF-670462 is a potent and selective inhibitor of CK1ε and δ with IC50 of 80 nM and 13 nM, respectively. Size: 10 mg, 50 mg. Soluble in DMSO > 10 mM.	

For more targets information, please see our website at"http://www.apexbt.com/research-area/stem-cell/wnt-signaling.html", or email us: info@apexbt.com.

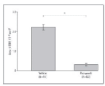
VEGFR Signaling Pathway



VEGFR Inhibitors

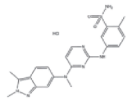
Pazopanib Hydrochloride

Pazopanib Hydrochloride is an inhibitor of VEGFR1, 2, 3, PDGFR, FGFR, c-Kit and c-Fms with IC50 of 10 nM, 30 nM, 47 nM, 84 nM, 74 nM, 140 nM and 146 nM, respectively.



Effect of oral administration of Pazopanib Hydrochloride vs vehicle on the development of choroidal neovascularization.

A8347

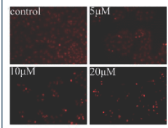


Size:
25 mg, 100 mg, 250 mg.

Soluble in DMSO > 10 mM.

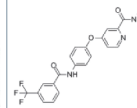
SKLB610

SKLB610 is a potent VEGFR inhibitor.



Treatment of SKLB610 induces apoptosis.

A8237

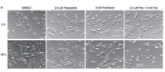


Size: 1 mg, 5 mg, 25 mg.

Soluble in DMSO.

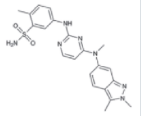
Pazopanib (GW-786034)

Pazopanib is a novel and multi-target inhibitor of VEGFR1, 2, 3, PDGFR, FGFR, c-Kit and c-Fms with IC50 of 10 nM, 30 nM, 47 nM, 84 nM, 74 nM, 140 nM and 146 nM, respectively.



Combination treatment of Pazopanib and Taxol affects cell morphology.

A3022

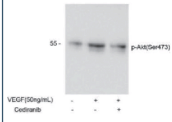


Size: 10 mg, 25 mg, 100 mg, 500 mg.

Soluble in DMSO > 10 mM.

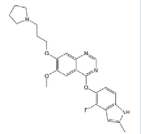
Cediranib (AZD2217)

Cediranib is a highly potent inhibitor of VEGFR with IC50 of < 1 nM.



Cediranib inhibits the VEGF induced phosphorylation of Akt.

A1882

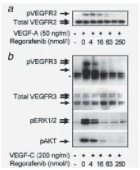


Size: 5 mg, 25 mg, 100 mg.

Soluble in DMSO > 10 mM.

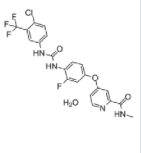
Regorafenib

Regorafenib (BAY 73-4506) is a multi-target inhibitor of VEGFR1, 2, 3, PDGFRβ, Kit, RET and Raf-1 with IC50 of 13 nM, 4.2 nM, 46 nM, 22 nM, 7 nM, 1.5 nM and 2.5 nM, respectively.



Regorafenib inhibits growth-factor-stimulated VEGFR2 and 3 autophosphorylation in HuVECs and LECs.

A8236

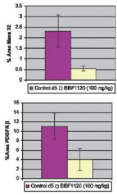


Size: 10 mg, 50 mg, 100 mg, 200 mg.

Soluble in DMSO > 10 mM.

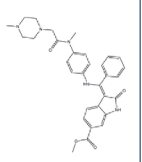
Nintedanib (BIBF 1120)

PSI is an inhibitor of proteasome.



Treatment of BIBF 1120 decreases PDGFR-β expressing cells.

A8252



Size: 510 mg, 50 mg, 100 mg, 200 mg.

Soluble in DMSO.

CDC42 Inhibitor

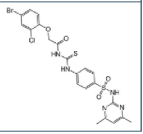
ZCL278

ZCL278 is a selective inhibitor of CDC42 GTPase with Kd of 11.4 μM.

Size:
10 mg, 25 mg, 50 mg, 100 mg.

Soluble in DMSO > 10 mM.

A8300



NFAT Inhibitor

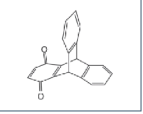
INCA-6

INCA-6 is a selective inhibitor of calcineurin-NFAT signaling.

Size: 10 mg, 50 mg.

Soluble in DMSO > 10 mM.

A4538



COX2 Inhibitor

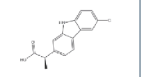
Carprofen

Carprofen inhibits canine COX2 with IC50 of 0.03 mM.

Size: 50 mg.

Soluble in DMSO > 10 mM.

B1690



Valdecoxib	B1459
Valdecoxib is a potent and selective inhibitor of COX2 with IC50 of 5 nM. Size: 10 mg, 50 mg. Soluble in DMSO > 10 mM.	

Celecoxib	A1664
Celecoxib is a highly selective inhibitor of COX2 with IC50 of 40 nM. Size: 100 mg. Soluble in DMSO > 10 mM.	

For more targets information, please see our website at "http://www.apexbt.com/research-area/tyrosine-kinase/vegfr.html", or email us: info@apexbt.com.

AP-1

SR 11302	A8185
SR 11302 is an inhibitor of activator protein-1 (AP-1). Size: 10 mg. Soluble in DMSO > 10 mM.	

VEGFR

IC50s compare:

Inhibitors	Pan-VEGFR	VEGFR1/FLT1	VEGFR2	VEGFR2/Flk1	VEGFR3/Flt4	mVEGFR-2	mVEGFR-3
Pazopanib Hydrochloride		**** 10 nM(IC50)	*** 30 nM(IC50)		*** 47 nM(IC50)		PDGFR, FGFR
Pazopanib		**** 10 nM(IC50)	*** 30 nM(IC50)		*** 47 nM(IC50)		PDGFR, FGFR
SKLB610	*		*				
Regorafenib		*** 13 nM(IC50)				**** 4.2 nM(IC50)	*** 46 nM(IC50)
Nintedanib		*** 34 nM(IC50)	*** 13 nM(IC50)		*** 13 nM(IC50)		
Cediranib		**** 5 nM(IC50)		***** 0.5 nM(IC50)	**** 3 nM(IC50)		

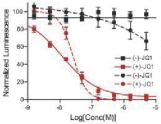
Note: "*" represents potency. The higher the number of "*" is, the more potent the inhibitor or activator is.

Others Inhibitors

Bromodomain Inhibitors

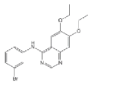
(+)-JQ1

(+)-JQ1 is an inhibitor of BET bromodomain with IC50 of 77 nM and 33 nM for BRD4(1) and BRD4(2).



(+)-JQ1 shows potent inhibition of H4Kac4 binding.

A1910



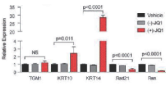
Size: 1 mg, 5 mg, 10 mg, 50 mg.

Soluble in DMSO > 10 mM.

Product Citation:
1. Nature neuroscience (2015).
2. Cell reports (2015).

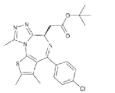
(-)-JQ1

(-)-JQ1, the stereoisomer (+)-JQ1, shows no significant interaction with any bromodomain.



Gene expression level of of TGM1, KRT10, KRT14, Rad21 and Ran under the treatment of (+)-JQ1 and (-)-JQ1.

A8181



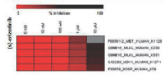
Size:
5 mg, 50 mg, 100 mg.

Product Citation:
1. Nature neuroscience (2015).
2. Cell reports (2015).

MTH1 Inhibitor

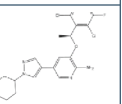
(S)-Crizotinib

(S)-Crizotinib,the (S)-enantiomer of Crizotinib, is a potent inhibitor of the human mutT homologue MTH1 (NUDT1) with IC50 of 72 nM.



(S)-Crizotinib shows different inhibition effects on kinases and other ATP binding proteins in HelaS3 lysate.

A8802



Size: 5 mg, 50 mg.

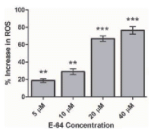
Soluble in DMSO > 10 mM.

Product Citation:
1. J Proteome Res. 2014 Sep 17.

Cathepsin Inhibitors

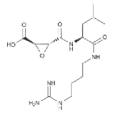
E-64

E-64 is a natural, potent and irreversible inhibitor of cysteine proteases. Its IC50 for Cathepsin K, S and L in vitro are 1.4, 4.1, and 2.5 nM, respectively.



E-64 treatment increases ROS generation.

A2576

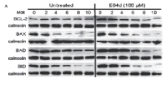


Size: 5 mg, 50 mg.

Soluble in DMSO > 10 mM.

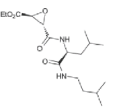
E 64d

E 64d, a synthetic analog of E 64 and ethyl ester of E 64c, is an irreversible and membrane-permeable inhibitor of lysosomal and cytosolic cysteine proteases. E 64d inhibits Calpain and the cysteine proteases Cathepsins F, K, B, H and L.



Treatment of E 64d on Bcl-2 family protein.

A1903

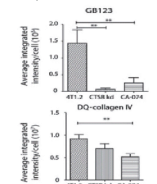


Size: 1 mg, 5 mg, 25 mg, 100 mg.

Soluble in DMSO > 10 mM.

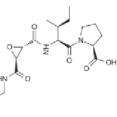
CA 074

CA 074 is an inhibitor of Cathepsin B with Ki of 2 - 5 nM, and displays selectivity over Cathepsins H and L with Ki of 40 - 200 μM.



CA 074 inhibits Cathepsin B.

A1926



Size: 1 mg, 5 mg, 10 mg, 25 mg.

Soluble in DMSO > 10 mM.

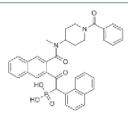
Cathepsin G Inhibitor I

A8174

Cathepsin G Inhibitor I is a potent, selective, reversible, competitive and non-peptide inhibitor of Cathepsin G.

Size: 1 mg, 5 mg, 10 mg.

Soluble in DMSO.



FXR Agonist

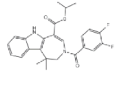
XL335

B1528

XL335 is a potent, selective and orally bioavailable agonist of the FXR with EC50 of 4 nM.

Size:
5 mg, 10 mg, 50 mg, 100 mg.

Soluble in DMSO > 10 mM.

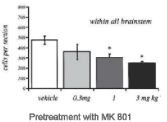


NMDA Antagonist

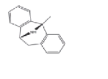
(+)-MK 801

A3100

(+)-MK 801 is a potent antagonist of NMDA with Ki of 30.5 nM.



Pretreatment with MK 801 dose-dependently decreases the number of c-fos-LI cells.



Size: 10 mg, 50 mg.

Soluble in DMSO, 0.1 M HCl, H_2O and ethanol.

MMP Inhibitors

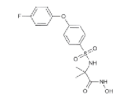
CP 471474

A4435

CP 471474 is a broad spectrum MMP inhibitor IC50 of 0.7, 0.9, 13, 16 and 1170 nM for MMP2, MMP13, MMP9, MMP3 and MMP1 respectively.

Size: 10 mg, 50 mg.

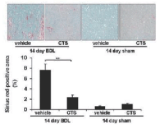
Soluble in DMSO > 10 mM.



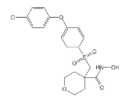
CTS-1027

A3334

CTS-1027 is an orally bioavailable and small-molecule inhibitor of MMPs with IC50 of 0.4 nM, 0.6 nM and 800 nM for MMP2, MMP13 and MMP1, respectively.



Hepatic fibrogenesis is reduced in BDL animals upon treatment with CTS-1027.



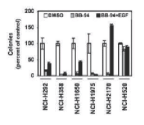
Size: 5 mg, 10 mg, 25 mg.

Soluble in DMSO.

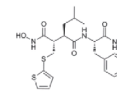
Batimastat (BB-94)

A2577

Batimastat (BB-94) is a potent and broad spectrum inhibitor of MMP for MMP1, MMP2, MMP9, MMP7 and MMP3 with IC50 of 3 nM, 4 nM, 4 nM, 6 nM and 20 nM, respectively.



Treatment of Batmastat reduces cancer cell colony formation.



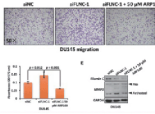
Size: 1 mg, 5 mg, 10 mg, 25 mg.

Soluble in DMSO > 10 mM.

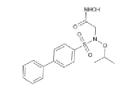
ARP 100

A4432

ARP 100 is a selective inhibitor of MMP2 with IC50 of 12 nM.



Treatment of ARP100 reverses the effect of Filamin C on the cell migration rate.



Size: 5 mg.

Soluble in DMSO > 10 mM.

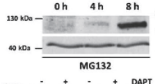
Product Citation:
1. Oncotarget 6.2 (2015): 1171.

Other

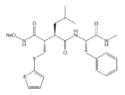
Batimastat sodium salt

A3957

Batimastat is an anticancer drug that belongs to the family of drugs called angiogenesis inhibitors.



Treatment of Batimastat inhibits N1[1c] production.



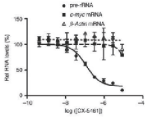
Size: 1 mg, 10 mg.

25℃; DMSO.

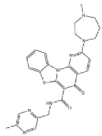
CX-5461

A8337

CX-5461 is an inhibitor of rRNA synthesis with IC50 of 142 nM for Pol I-driven transcription of rRNA.



Treatment of CX-5461 inhibits rRNA synthesis.



Size: 5 mg, 10 mg, 50 mg.

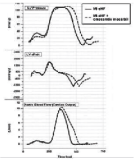
Limited solubility.

ATPase Activator

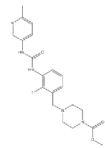
Omecamtiv mecarbil

A8349

Omecamtiv mecarbil (CK-1827452) is a specific activator of cardiac myosin activator and a clinical drug for left ventricular systolic heart failure.



Contractile effects of Omecamtiv mecarbil.



Size: 5 mg, 10 mg, 50 mg.

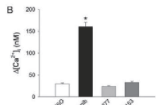
Soluble in DMSO > 10 mM.

Transferase Inhibitor

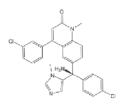
Tipifarnib (Zarnestra)

A4227

Tipifarnib (R115777) is a potent and specific inhibitor of farnesyltransferase with IC50 of 0.6 nM.



Tipifarnib promotes Ca^{2+} elevation.



Size: 5 mg, 25 mg, 100 mg.

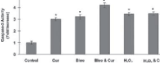
Soluble in DMSO > 10 mM.

DNA Synthesis Inhibitor and Agent

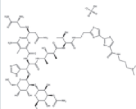
Bleomycin Sulfate

A8331

Bleomycin Sulfate is a glycopeptide antibiotic and an anticancer agent for squamous cell carcinomas (SCC) with IC50 of 4 nM in UT-SCC-19A cells.



Caspase-3 activity in Bleomycin treated cells.



Size: 10 mg, 50 mg.

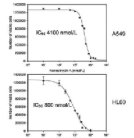
Soluble in DMSO > 10 mM.

DNMT Inhibitors

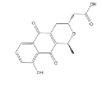
Nanaomycin A

A8191

Nanaomycin A is a selective inhibitor of DNMT3B.



Treatment of Nanaomycin A affects cell viability.



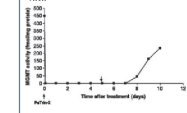
Size: 5 mg, 25 mg.

Soluble in methanol.

Other

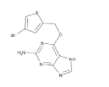
Lomeguatrib

Lomeguatrib is a potent inhibitor of O6-alkylguanine-DNA -alkyltransferase with IC50 of 5 nM.



Treatment of Lomeguatrib on the MGMT activity.

A1912

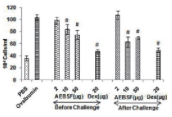


Size: 5 mg, 10 mg, 25 mg.

Soluble in DMSO > 10 mM.

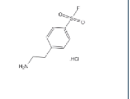
AEBSF.HCl

AEBSF.HCl is an irreversible and broad spectrum inhibitor of serine protease.



Treatment of AEBSF suppresses cellular infiltration.

A2573



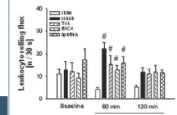
Size:
25 mg, 100 mg, 500 mg.

Soluble in DMSO > 10 mM.

Serine Protease Inhibitors

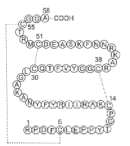
Aprotinin

Aprotinin is the small protein bovine pancreatic trypsin inhibitor (BPTI).



Treatment of Aprotinin affects postischemic leukocyte response.

A2574



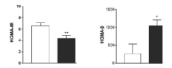
Size: 10 mg, 100 mg.

Soluble to 10 mg/ml in sterile water.

DPP4 Inhibitors

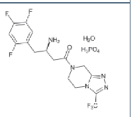
Sitagliptin phosphate monohydrate

Sitagliptin phosphate is a potent inhibitor of DPP5 with IC50 of 19 nM in Caco-2 cell extracts.



Treatment of sitagliptin decreases Insulin resistance and enhances β-cell function.

A4036



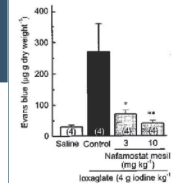
Size: 200 mg, 500 mg.

Soluble in DMSO > 10 mM.

Product Citation:
1. Diabetes, Obesity and Metabolism (2015).

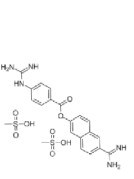
Nafamostat Mesylate (FUT-175)

Nafamostat Mesylate is an anticoagulant.



Treatment of Nafamostat reverses the ioxaglate-induced pulmonary vascular hyper-permeability in rats.

A2586

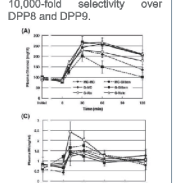


Size: 10 mg, 50 mg.

Soluble in DMSO > 10 mM.

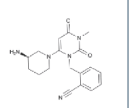
Alogliptin (SYR-322)

Alogliptin is a potent, selective inhibitor of DPP4 with IC50 of < 10 nM, exhibits greater than 10,000-fold selectivity over DPP8 and DPP9.



Effects of Alogliptin on plasma glucose and plasma IRI.

A4038



Size: 5 mg, 10 mg, 50 mg, 100 mg.

Soluble in DMSO > 10 mM.

Other

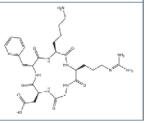
Integrin Inhibitor

Cyclo (-RGDfK) — A8164

Cyclo (-RGDfK) is a potent and selective inhibitor of the αvβ3 integrin.

Size: 1 mg, 5 mg.

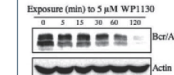
Soluble in Water.



DUB Inhibitors

WP1130 — A8323

WP1130 is a selective inhibitor of DUB.



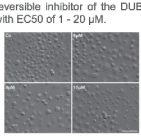
WP1130 inhibits the activity of Bcr/Abl.

Size: 5 mg, 10 mg, 50 mg, 100 mg.

Soluble in DMSO > 10 mM.

PR-619 — A8212

PR-619 is a non-selective and reversible inhibitor of the DUBs with EC50 of 1 - 20 μM.



Treatment of PR-619 affects cell morphology.

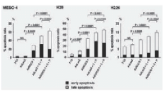
Size: 1 mg, 5 mg, 25 mg, 100 mg.

Soluble in DMSO > 10 mM.

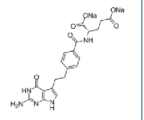
DHFR Inhibitor

Pemetrexed — A4390

Pemetrexed is a novel antifolate and antimetabolite for TS, DHFR and GARFT with Ki of 1.3 nM, 7.2 nM and 65 nM, respectively.



Treatment of Pemetrexed induces apoptosis.



Size: 10 mg, 50 mg, 200 mg.

Limited solubility.

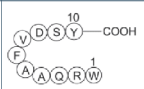
Gap Junction Blocker

10Panx — A2700

10Panx, Panx-1 mimetic inhibitory peptide, is a blocker of pannexin-1 gap junctions.

Size: 1 mg, 5 mg, 10 mg, 25 mg.

Soluble to 1 mg/ml in 20mM PBS buffer.

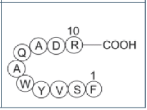


Scrambled 10Panx — A2701

10Panx, Panx-1 mimetic inhibitory peptide, is a blocker of pannexin-1 gap junctions.

Size: 1 mg, 5 mg, 10 mg, 25 mg.

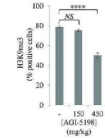
Soluble to 0.50 mg/ml in sterile water.



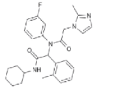
Dehydrogenase Inhibitor

AGI-5198 — A4339

AGI-5198 is the first highly potent and selective inhibitor of IDH1 R132H and IDH1 R132C mutants with IC50 of 0.07 μM and 0.16 μM, respectively.



AGI-5198 inhibits H3K9 trimethylation.



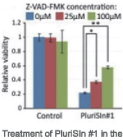
Size: 5 mg, 25 mg.

Soluble in DMSO > 10 mM.

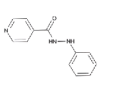
DHFR Inhibitor

NSC 14613 — A4351

PluriSln #1 (NSC 14613) is an inhibitor of the stearoyl-coA desaturase 1 (SCD1).



Treatment of PluriSln #1 in the presence of pan-caspase inhibitor Z-VAD-FMK.



Size: 10 mg, 50 mg.

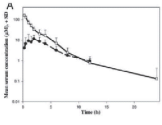
Soluble in DMSO.

Other

HCV Protease Inhibitor

PSI-6206

PSI-6206 (RO2433) is a selective inhibitor of HCV RNA polymerase.



Deaminated metabolite PSI-6206 (circles) after IV administration of PSI-6130.

A8189

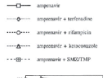
Size: 5 mg, 10 mg, 25 mg, 50 mg.

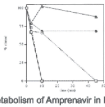
Soluble in DMSO.

Amprenavir (agenerase)

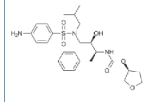
A8201

Amprenavir is an inhibitor of HIV protease with IC50 of 14.6 ng/mL in wild-type HIV isolates.





Metabolism of Amprenavir in liver microsome.



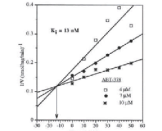
Size: 5 mg, 50 mg.

Soluble in DMSO > 10 mM.

HIV Protease Inhibitors

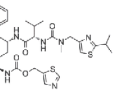
Ritonavir

Ritonavir is an antiretroviral (HIV) drug and inhibitor of particular liver enzyme that normally metabolizes protease.



Effect of Ritonavir on the human liver microsomal metabolism of AST-378.

A8203



Size: 10 mg, 25 mg, 50 mg, 100 mg.

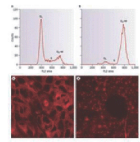
Soluble in DMSO > 10 mM.

Microtubule/Tubulin Agent

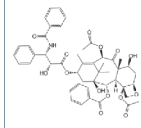
Paclitaxel (Taxol)

A4393

Paclitaxel is a microtubule polymer stabilizer with IC50 of 0.1 pM in human endothelial cells.



Taxol treatment induces mitotic arrest and abnormal spindle formation.



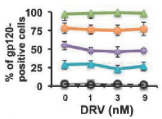
Size: 10 mg, 50 mg.

Soluble in DMSO > 10 mM.

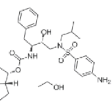
Darunavir

A8206

Darunavir is an inhibitor of HIV protease.



Darunavir has no effect on Provirus activation.



Size: 5 mg, 50 mg.
Soluble in DMSO > 10 mM

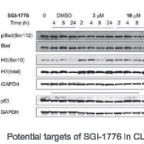
Product Citation:
1. The Journal of Immunology (2014): 1303030.

Pim Inhibitor

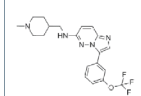
SGI-1776 free base

A4192

SGI-1776 is a novel ATP competitive inhibitor of Pim1 with IC50 of 7 nM, 50- and 10-fold selective versus Pim2 and Pim3.



Potential targets of SGI-1776 in CLL primary cell line.



Size: 5 mg, 10 mg, 50 mg.

Soluble in DMSO > 10 mM.

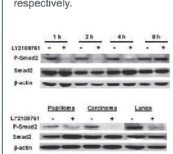
Product Citation:
1. Sci Signal. 2014 Dec 23.

Other

TGF-βR1 Inhibitors

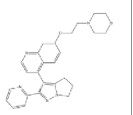
LY2109761

LY2109761 is a novel and selective dual inhibitor of TGF-β receptor type I/II (TβRI/II) with KI of 38 nM and 300 nM, respectively.



Treatment of LY2109761 effects the levels of P-Smad2, total Smad2 and β-actin.

A8464



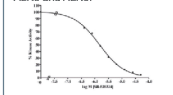
Size: 5 mg, 10 mg, 50 mg.

Limited solubility.

Product Citation:
1. Molecular and Cellular Biology (2014): MCB-00611.

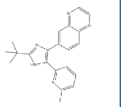
SB525334

SB525334 is a potent and selective inhibitor of TGF-β receptor I with IC50 of 14.3 nM, is 4-fold less potent to ALK4 than ALK5 and inactive to ALK2, ALK3 and ALK6.



SB525334 inhibits p38α kinase activity.

A5602

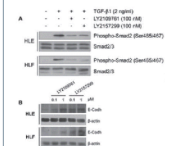


Size: 5 mg, 25 mg, 100 mg.

Soluble in DMSO > 10 mM.

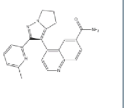
LY2157299

LY2157299 is a potent inhibitor of TGF-βRI with IC50 of 56 nM.



LY2157299 inhibits TGF-β pathway.

A8348



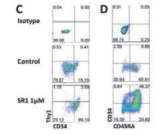
Size: 5 mg, 10 mg, 50 mg.

Soluble in DMSO > 10 mM.

AhR Inhibitor

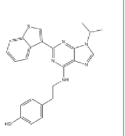
StemRegenin 1 (SR1)

StemRegenin 1 is an inhibitor of AhR with IC50 of 127 nM.



SR1 maintains an HSC phenotype and increases CFU content.

A8224



Size: 10 mg, 50 mg, 100 mg, 200 mg.

Soluble in DMSO > 10 mM.

Thrombin Inhibitor

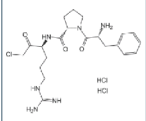
PPACK Dihydrochloride

PPACK Dihydrochloride is a potent, selective and irreversible inhibitor of thrombin with Ki of 0.24 nM.

Size: 5 mg.

Soluble in DMSO > 10 mM.

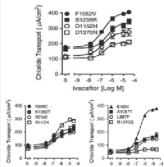
A2588



CFTR Potentiator and Inhibitor

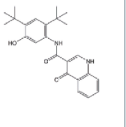
Ivacaftor (VX-770)

Ivacaftor (VX-770) is a potentiator of CFTR for G551D-CFTR and F508del-CFTR with EC50 of 100 nM and 25 nM, respectively.



Ivacaftor inhibits mutant CFTR.

A5047



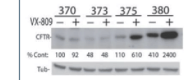
Size: 5 mg, 25 mg, 100 mg.

Soluble in DMSO > 10 mM.

Other

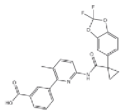
VX-809

VX-809 (Lumacaftor) acts to correct CFTR mutations common in cystic fibrosis by increasing mutant CFTR (F508del-CFTR) maturation with EC50 of 0.1 μM.



VX-809 stabilizes N-terminal region of CFTR.

A8351



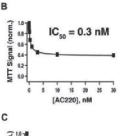
Size: 5 mg, 10 mg, 50 mg.

Soluble in DMSO > 10 mM.

FLT3 Inhibitor

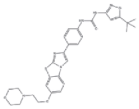
Quizartinib (AC220)

Quizartinib (AC220) is a second-generation inhibitor of FLT3 for FLT3 (ITD/WT) with IC50 of 1.1 nM and 4.2 nM, respectively. It is 10-fold more selective for FLT3 than KIT, PDGFRα, PDGFRβ, RET and CSF-1R.



Treatment of Quizartinib reduces cell viability.

A5793



Size: 5 mg, 25 mg, 100 mg.

Soluble in DMSO > 10 mM.

BTK Inhibitors

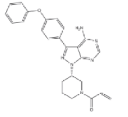
PCI-32765 Racemate

PCI-32765 is an inhibitor of BTK with IC50 of 0.5 nM.

Size: 1 g.

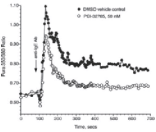
Soluble in DMSO.

B3242



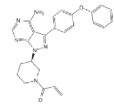
PCI-32765 (Ibrutinib)

Ibrutinib is a potent and highly selective inhibitor of BTK with IC50 of 0.5 nM, modestly potent to Bmx, CSK, FGR, BRK, HCK, less potent to EGFR, HER2, JAK3, etc.



Treatment of PCI-32765 in basophils.

A3001



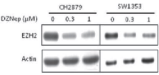
Size: 5 mg, 10 mg, 50 mg, 200 mg.

Soluble in DMSO > 10 mM.

EZH2 Inhibitors

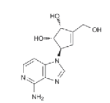
3-Deazaneplanocin, DZNep

3-deazaneplanocin A (DZNeP), an analog of adenosine, is a competitive inhibitor of S-adenosylhomocysteine hydrolase with Ki of 50 pM.



Treatment of DZNeP inhibits EZH2 level.

A1905

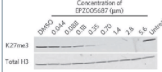


Size: 5 mg, 10 mg, 25 mg, 50 mg.

Soluble in Water.

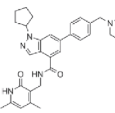
EPZ005687

EPZ005687 is a potent and selective inhibitor of EZH2 with Ki of 24 nM, 50-fold selectivity against EZH1 and 500-fold selectivity against 15 other protein methyltransferases.



EPZ005687 inhibits H3K27 methylation.

A4171



Size: 5 mg, 25 mg.

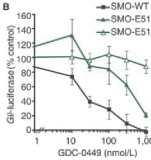
Limited solubility.

other

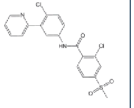
Hedgehog Inhibitors

GDC-0449 (Vismodegib) — A3021

Vismodegib (GDC-0449) is a potent, novel and specific inhibitor of hedgehog with IC50 of 3 nM and also inhibitor of P-gp with IC50 of 3.0 μM.



Treatment of GDC-0449 transfects the gli-luciferase reporter activity in CH310T 1/2 cells.

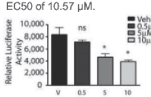


Size: 10 mg, 50 mg, 200 mg, 500 mg.

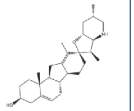
Soluble in DMSO > 10 mM.

Cyclopamine — A8340

Cyclopamine is a naturally occurring Hedgehog specific small molecule signaling steroidal alkaloid inhibitor with EC50 of 10.57 μM.



Cyclopamine inhibits Hedgehog pathway.

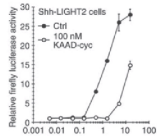


Size: 5 mg, 10 mg, 25 mg.

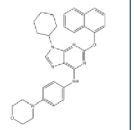
Limited solubility.

Purmorphamine — A8228

Purmorphamine is a blocker of BODIPY-cyclopamine binding to Smo with IC50 of ~ 1.5 μM and also an inducer of osteoblast differentiation with EC50 of 1 μM.



Purmorphamine activates Hedgehog pathway.



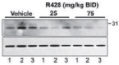
Size: 5 mg, 25 mg.

Limited solubility.

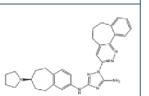
Axl Inhibitor

R428 — A8329

R428 (BGB324) is an inhibitor of Axl with IC50 of 14 nM, > 100-fold selective for Axl versus Abl.



Treatment of R428 inhibits Snail expression.



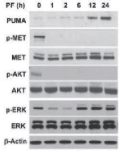
Size: 5 mg, 10 mg, 50 mg.

Soluble in DMSO > 10 mM.

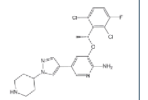
ALK Inhibitors

(R)-Crizotinib — A3020

Crizotinib (PF-02341066) is a potent inhibitor of c-Met and ALK with IC50 of 11 nM and 24 nM, respectively.



HCT116 cells were treated with Crizotinib.

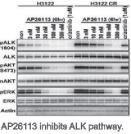


Size: 5 mg, 10 mg, 50 mg.

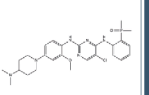
Limited solubility.

AP26113 — A1367

AP26113 is a potent inhibitor of ALK with IC50 of 0.62 nM.



AP26113 inhibits ALK pathway.



Size: 5 mg, 25 mg, 100 mg.

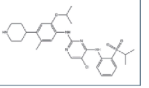
Soluble in DMSO > 10 mM.

LDK378 — A8328

LDK378 is a potent inhibitor of ALK with IC50 of 0.2 nM.

Size: 10 mg, 50 mg, 200 mg.

Soluble in DMSO.

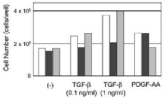


Other

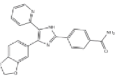
SB 431542

A8249

SB 431542 is a potent and selective inhibitor of ALK5 with IC50 of 94 nM, 100-fold more selective for ALK5 than p38 MAPK and other kinases.



Effect of SB 431542 on cell proliferation.



Size: 1 mg, 10 mg.

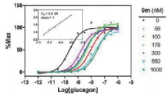
Soluble in DMSO > 10 mM.

Glucagon Receptor Inhibitor

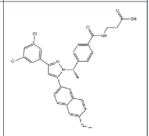
MK 0893

A3608

MK 0893 is an inhibitor of both glucagon receptor and IGF-1R with IC50 of 6.6 nM and 6 nM, respectively.



MK 0893 is tested by Schild Analysis in CHO cells.



Size: 5 mg, 200 mg.

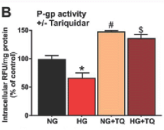
Soluble in DMSO.

P-gp Inhibitors

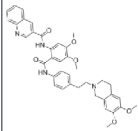
Tariquidar

A8208

Tariquidar (XR9576) is a potent and selective noncompetitive inhibitor of P-gp with Kd of 5.1 nM.



Effects of hypo- and hyperglycemic challenge on P-gp and BCRP efflux activity.



Size: 10 mg, 50 mg.

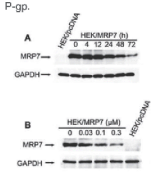
Soluble in DMSO > 10 mM.

Product Citation:
1. Neuroscience letters 598 (2015): 59 - 65. PMID: 25982326.

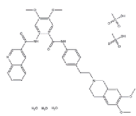
Tariquidar methanesulfonate, hydrate

A3859

Tariquidar methanesulfonate, hydrate is a potent inhibitor of P-gp.



Treatment of Tariquidar downregulates MRP7.



Size: 10 mg, 25 mg, 50 mg, 100 mg.

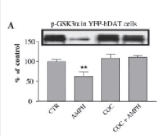
Soluble in DMSO.

Other

Akt Related

KinaseSTAR Akt Activity Assay Kit — K2080

The KinaseSTAR Akt Activity Assay Kit provides a specific and simple way for detection of Akt activity based on Western Blot method.



Cocaine blocks the AMPH-induced decrease of Akt activity.

Size: 40 assays.

Sample type: Cell and Tissue lysates.

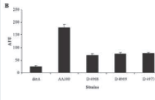
Species reactivity: Mammalian.

Detection method: Western blot analysis using anti-Phospho-GSK-3α (Ser 21) antibody at 1:1000 dilutions.

Caspase Related

Caspase-3 Fluorometric Assay Kit — K2007

The Caspase-3 Fluorometric Assay Kit provides a convenient and simple way for detecting the DEVD-dependent caspase activity.



Detection of Caspase-3 activation by its cleavage of a fluorescent substrate.

Size: 25 assays, 100 assays, 200 assays, 400 assays.

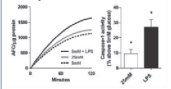
Sample type: Cell and tissue lysates.

Species reactivity: Mammalian.

Detection method: Fluorescence (400 nm excitation filter and 505 nm emission filter).

Caspase-1 Fluorometric Assay Kit — K2010

The Caspase-1 Fluorometric Assay Kit provides a convenient and simple way for detecting the YVAD-dependent caspase activity.



ZVAD suppresses the proteolytic processing of Panx1

Size: 25 assays, 100 assays, 200 assays, 400 assays.

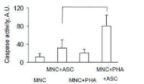
Sample type: Cell and tissue lysates.

Species reactivity: Mammalian.

Detection method: Fluorescence (400 nm excitation filter and 505 nm emission filter).

Caspase-1 Colorimetric Assay Kit — K2011

The Caspase-1 Colorimetric Assay Kit provides a convenient and simple way for detecting the YVAD-dependent caspase activity.



Measurement of Caspase-1 activity in ASC-MNC by Caspase-1 Colorimetric Assay Kit.

Size: 25 assays, 100 assays, 200 assays, 400 assays.

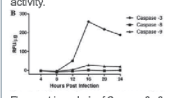
Sample type: Cell and tissue lysates.

Species reactivity: Mammalian.

Detection method: Absorbance (400 or 405 nm).

Caspase-8 Fluorometric Assay Kit — K2012

The Caspase-8 Fluorometric Assay Kit provides a convenient and simple way for detecting the IETD-dependent caspase activity.



Fluorometric analysis of Caspase-3, -8 and -9 activities in MNV-1-infected RAW264.

Size: 25 assays, 100 assays, 200 assays, 400 assays.

Sample type: Cell and tissue lysates.

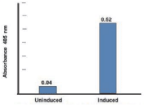
Species reactivity: Mammalian.

Detection method: Fluorescence (400 nm excitation filter and 505 nm emission filter).

Caspase-3 Colorimetric Assay Kit

K2008

The Caspase-3 Colorimetric Assay Kit provides a convenient and simple way for detecting the DEVD-dependent caspase activity.



Induction of Caspase-3 activity by Anti-Fas antibody in Jurkat-T cells by Caspase-3 Colorimetric Assay Kit.

Size: 25 assays, 100 assays, 200 assays, 400 assays.

Sample type: Cell and tissue lysates.

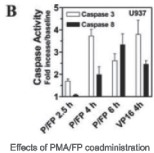
Species reactivity: Mammalian.

Detection method: Absorbance (400 or 405 nm).

Caspase-8 Colorimetric Assay Kit

K2013

The Caspase-8 Colorimetric Assay Kit provides a convenient and simple way for detecting the IETD-dependent caspase activity.



Effects of PMA/FP coadministration on Caspase-8 activation.

Size: 25 assays, 100 assays, 200 assays, 400 assays.

Sample type: Cell and tissue lysates.

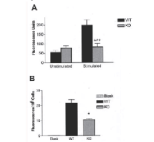
Species reactivity: Mammalian.

Detection method: Absorbance (400 or 405 nm).

Caspase-6 Fluorometric Assay Kit

K2014

The Caspase-6 Fluorometric Assay Kit provides a convenient and simple way for detecting the VEID-dependent caspase activity.



Impaired transcriptional up-regulation and enzymatic activity of Caspase-6 in p85β-deficient T cells.

Size: 25 assays, 100 assays, 200 assays, 400 assays.

Sample type: Cell and tissue lysates.

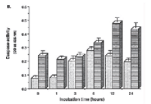
Species reactivity: Mammalian.

Detection method: Fluorecence (400 nm excitation filter and 505 nm emission filter).

Caspase-6 Colorimetric Assay Kit

K2015

The Caspase-6 Colorimetric Assay Kit provides a convenient and simple way for detecting the VEID-dependent caspase activity.



Increased caspase activities in CEM cells treated with 3-IAABE (Activity of Caspase-6 was measured by Caspase-6 Colorimetric Assay Kit).

Size: 25 assays, 100 assays, 200 assays, 400 assays.

Sample type: Cell and tissue lysates.

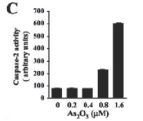
Species reactivity: Mammalian.

Detection method: Absorbance (400 or 405 nm).

Caspase-2 Fluorometric Assay Kit

K2016

The Caspase-2 Fluorometric Assay Kit provides a convenient and simple way for detecting the VDVAD-dependent caspase activity.



Dose response of Caspase-2 activation induced by As_2O (Caspase-2 activation detected by Caspase-2 Fluorometric Assay Kit).

Size: 25 assays, 100 assays, 200 assays, 400 assays.

Sample type: Cell and tissue lysates.

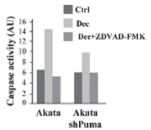
Species reactivity: Mammalian.

Detection method: Fluorecence (400 nm excitation filter and 505 nm emission filter).

Caspase-2 Colorimetric Assay Kit

K2017

The Caspase-2 Colorimetric Assay Kit provides a convenient and simple way for detecting the VDVAD-dependent caspase activity.



Caspase-2 activity was measured by Caspase-2 Colorimetric Assay Kit.

Size: 25 assays, 100 assays, 200 assays, 400 assays.

Sample type: Cell and tissue lysates.

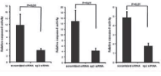
Species reactivity: Mammalian.

Detection method: Absorbance (400 or 405 nm).

Caspase-9 Fluorometric Caspase Assay Kit

K2018

The Caspase-9 Fluorometric Assay Kit provides a convenient and simple way for detecting the LEHD-dependent caspase activity.



Caspases are reduced by Sp3 silencing.

Size: 25 assays, 100 assays, 200 assays, 400 assays.

Sample type:
Cell and tissue lysates.

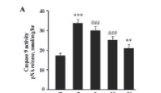
Species reactivity:
Mammalian.

Detection method:
Fluorecence (400 nm excitation filter and 505 nm emission filter).

Caspase-9 Colorimetric Assay Kit

K2019

The Caspase-9 Colorimetric Assay Kit provides a convenient and simple way for detecting the LEHD-dependent caspase activity.



SEGA prevents the activation of mitochondrial pathway of apoptosis.

Size: 25 assays, 100 assays, 200 assays, 400 assays.

Sample type:
Cell and tissue lysates.

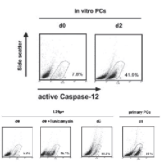
Species reactivity:
Mammalian.

Detection method:
Absorbance (400 or 405 nm).

Fluorescein Active Caspase-12 Staining Kit

K2046

The Fluorescein Caspase-12 Staining Kit is an easy and sensitive way of detecting activated Caspase-12 in living cells. This assay uses the Caspase-12 Inhibitor, ATAD-FMK, coupled to FITC (FITC-ATAD-FMK) as a marker.



Analysis of Caspase-12 activation by staining with Fluorescein Caspase-12 Staining kit.

Size: 25 assays, 100 assays.

Sample type:
Living cells.

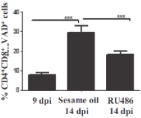
Species reactivity:
Mammalian.

Detection method: Flow cytometry and fluorescence plate reader (Ex. = 485 nm and Em. = 535 nm).

Fluorescein Active Caspase Staining Kit

K2047

The Fluorescein Caspase Staining Kit is an easy and sensitive way of detecting activated caspases in living cells. This assay uses the caspase family inhibitor, VAD-FMK, coupled to FITC (FITC-VAD-FMK) as a marker.



DP thymocytes were labeled for VAD-FITC by Fluorescein Active Caspase Staining Kit.

Size: 25 assays, 100 assays.

Sample type:
Living cells.

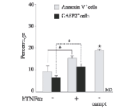
Species reactivity:
Mammalian.

Detection method: Flow cytometry and fluorescence plate reader (Ex. = 485 nm and Em. = 535 nm).

Fluorescein Active Caspase-2 Staining Kit

K2048

The Fluorescein Active Caspase-2 Staining Kit is an easy and sensitive way of detecting activated Caspase-2 in living cells.



HUVECs expressed Caspase-2 activity was evaluated by the Fluorescein Active Caspase-2 Staining kit.

Size: 25 assays, 100 assays.

Sample type:
Living cells.

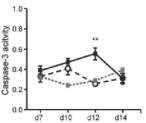
Species reactivity:
Mammalian.

Detection method: Flow cytometry and fluorescence plate reader (Ex. = 485 nm and Em. = 535 nm).

Fluorescein Active Caspase-3 Staining Kit

K2049

The Fluorescein Active Caspase-3 Staining Kit is an easy and sensitive way of detecting activated Caspase-3 in living cells.



Flow cytometry for Caspase-3 activity is measured by Fluorescein Active Caspase-3 Staining Kit.

Size: 25 assays, 100 assays.

Sample type:
Living cells.

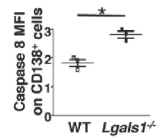
Species reactivity:
Mammalian.

Detection method: Flow cytometry and fluorescence plate reader (Ex. = 485 nm and Em. = 535 nm).

Fluorescein Active Caspase-8 Staining Kit

K2050

The Fluorescein Caspase-8 Staining Kit is an easy and sensitive way of detecting activated Caspase-8 in living cells.



Quantification of Caspase-8 activation by Fluorescein Active Caspase-8 Staining Kit and flow cytometry.

Size: 25 assays, 100 assays.

Sample type: Living cells.

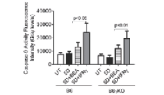
Species reactivity: Mammalian.

Detection method: Flow cytometry and fluorescence plate reader (Ex. = 485 nm and Em. = 535 nm).

Fluorescein Active Caspase-9 Staining Kit

K2051

The Fluorescein Caspase-9 Staining Kit is an easy and sensitive way of detecting activated Caspase-9 in living cells.



Desiccating stress has no effect on Caspase-9 activity in B6 mice and B6γ KO mice.

Size: 25 assays, 100 assays.

Sample type: Living cells.

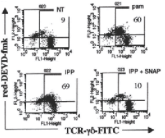
Species reactivity: Mammalian.

Detection method: Flow cytometry and fluorescence plate reader (Ex. = 485 nm and Em. = 535 nm).

Red Active Caspase-3 Staining Kit

K2053

The Red Caspase-3 Staining Kit is an easy and sensitive way of detecting activated caspases in living cells.



Both IPP and Pamidronate strongly increase the percentage of Caspase 3-positive cells in long-term cultured γδ T cell clones.

Size: 25 assays, 100 assays.

Sample type: Living cells.

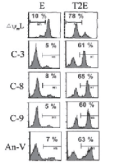
Species reactivity: Mammalian.

Detection method: Flow cytometry and fluorescence plate reader (Ex/Em = 540/570 nm).

Red Active Caspase-8 Staining Kit

K2054

The Red Caspase-8 Staining Kit is an easy and sensitive way of detecting activated caspases in living cells.



The activated Caspase-8 was evaluated with the Red Active Caspase-8 staining kits by flow cytometry.

Size: 25 assays, 100 assays.

Sample type: Living cells.

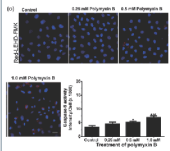
Species reactivity: Mammalian.

Detection method: Flow cytometry and fluorescence plate reader (Ex/Em = 540/570 nm).

Red Active Caspase-9 Staining Kit

K2055

The Red Caspase-9 Staining Kit is an easy and sensitive way of detecting activated caspases in living cells.



Activation of Caspase-9 in rat kidney proximal tubular cells was measured by Red Active Caspase-9 Staining Kit.

Size: 25 assays, 100 assays.

Sample type: Living cells.

Species reactivity: Mammalian.

Detection method: Flow cytometry and fluorescence plate reader (Ex/Em = 540/570 nm).

Red Active Caspase Staining Kit

K2052

The Red Active Caspase Staining Kit is an easy and sensitive way of detecting activated caspases in living cells. This assay uses the caspase family inhibitor, VAD-FMK, coupled to sulfo-rhodamine as a marker.

Size: 25 assays, 100 assays.

Size: 25 assays, 100 assays.

Sample type: Living cells.

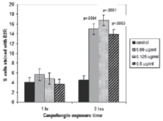
Species reactivity: Mammalian.

Detection method: Flow cytometry and fluorescence plate reader (Ex/Em = 540/570 nm).

Kits

Caspase Screening Kit — K2056

The Caspase Screening Kit is an easy and sensitive way of detecting activated caspases in living cells.



Effect of Caspofungin on intracellular metacaspase activation, as determined by Caspase Screening Kit.

Size: 25 assays, 100 assays.

Sample type: Living cells.

Species reactivity: Mammalian.

Detection method: Flow cytometry, L-1 channel (Ex/Em = 488/530 nm).

Active Human Caspases Group IV — K2060

Active Human Caspases Group IV are recombinant caspases that expressed in E.coli, and as a positive control in caspase activity assays.

Hydrolysis of PSI-7851 by various enzymes

Enzyme	Type	Source	Activity nmol/min/µg
Trypsin	Serine protease	Pancreas	ND[a]
Chymotrypsin	Serine protease	Pancreas	ND
Chymase	Serine protease	Skin	ND
Elastase	Serine protease	Neutrophil	6.5
Cathepsin A	Serine protease	Recombinant	27.0
Cathepsin B	Cysteine protease	Liver	ND
Cathepsin D	Aspartic protease	Liver	ND
Cathepsin H	Cysteine protease	Liver	ND
Cathepsin L	Cysteine protease	Liver	ND
Carboxylesterase 1	Serine esterase	Recombinant	1.8
Carboxylesterase 2	Serine esterase	Recombinant	ND
Calpain 1	Cysteine protease	Plasma	ND
Caspase 1–10	Cysteine protease	Recombinant	ND
Lipase	Serine esterase	Pancreas	ND

[a] ND means not detected after a 2-h incubation with 100 µM of PSI-7851.

Size: 10x25 units.

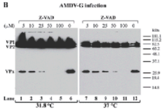
Source: E. coli.

Appearance: Lyophilized.

Solubility: Reconstituted to 0.1 - 1 unit per µl in PBS or the Reaction Buffer for longer stability.

Active Human Caspases Group III — K2063

Active Human Caspases Group III are recombinant caspases that expressed in E.coli and routinely tested for their ability to enzymatically cleave the substrate VEID-pNA (for Caspase-6), IETD-pNA (for Caspase-8 & -10) and LEHD-pNA (for Caspase-9), respectively.



The purified proteins was subjected to active caspase cleavage addition of 1 unit of purified active Caspase-1, -2, -3, -6, -7, -8, -9, and -10 (Active Human Caspases Group III Kit).

Size: 4x25 units.

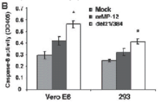
Source: E. coli.

Appearance: Lyophilized.

Solubility: Reconstitute to 1 unit per µl in PBS containing 15% glycerol.

Caspase Colorimetric Substrate Set II — K2145

Caspase Colorimetric Substrate Set II is composed of ready-to-use colorimetric substrates for Caspase-1, -2, -3, -4, -5, -6, -8, -9 and -10 of caspase family proteases.



Enzymatic activities of caspases in virus-infected cells.

Size: 9 x 25 assays.

Sample type: Cell culture.

Species reactivity: Mammalian.

Detection method: Absorbance (400 or 405 nm).

Caspase Colorimetric Substrate Set Plus — K2146

Caspase Fluorometric Substrate Set Plus is composed of ready-to-use AFC-labeled substrates for Caspase-1, -2, -3, -5, -6, -8 and -9 of caspase family proteases. The kit is used to detect activities of members of caspase family proteases.

Size: 7 x 25 assays.

Sample type: Cell culture.

Species reactivity: Mammalian.

Detection method: Fluorescence (Ex/Em = 400/505 nm).

Caspase Colorimetric Substrate Set Plus — K2147

Caspase Colorimetric Substrate Set Plus is used to assay activity of caspase family proteases.

Size: 7 x 25 assays.

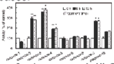
Sample type: Cell culture.

Species reactivity: Mammalian.

Detection method: Absorbance (400 or 405 nm).

Caspase Fluorometric Substrate Set II Plus — K2148

Caspase Fluorometric Substrate Set II Plus is composed of ready-to-use AFC-labeled substrates for Caspase-1, -2, -3/7, -4, -5, -6, -8, -9 and -10 of caspase family proteases. The kit is used to detect activities of members of caspase family proteases.



Activities of major caspases in HL-60 cells after CSME treatment relative to those of untreated cells in the control.

Size: 9 x 25 assays.

Sample type: Cell culture.

Species reactivity: Mammalian.

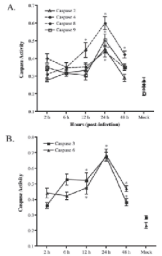
Detection method: Absorbance (400 or 405 nm).

Kits

Caspase Colorimetric Substrate Set II Plus

K2149

Caspase Colorimetric Substrate Set II Plus is composed of ready-to-use pNA-labeled substrates for Caspase-1, -2, -3, -4, -5, -6, -8, -9 and -10 of caspase family proteases. The kit is used to detect activities of members of caspase family proteases.



Assessment of the cytosolic caspase activity of C. parvum-infected HCT-8 cells.

Size: 9 x 25 assays.

Sample type: Cell culture.

Species reactivity: Mammalian.

Detection method: Flow Absorbance (400 or 405 nm).

Caspase-12 Fluorometric Kit

K2150

The Caspase-12 Fluorometric Assay Kit provides a highly sensitive, simple and convenient way for detecting the ATAD-dependent caspase activity based on detection of cleavage of substrate ATAD-AFC.

Size: 25 assays, 100 assays.

Sample type: Cell culture.

Species reactivity: Mammalian.

Detection method: Fluorescence (Ex/Em = 400/505 nm).

Caspase-1 Inhibitor Drug Screening Kit

K2157

The Caspase-1 Inhibitor Drug Screening Kit (Fluorometric) provides a simple, fast and convenient way for screening of Caspase-1 inhibitors based on fluorometric method.

Size: 100 assays.

Sample type: Cell samples treated with caspase inhibitor drugs.

Species reactivity: Mammalian.

Detection method: Fluorescence (Ex/Em = 400/505 nm).

Caspase-2 Inhibitor Drug Screening Kit

K2158

The Caspase-2 Inhibitor Drug Screening Kit (Fluorometric) provides a simple, fast and convenient way for screening of Caspase-2 inhibitors based on fluorometric method.

Size: 100 assays.

Sample type: Cell samples treated with caspase inhibitor drugs.

Species reactivity: Mammalian.

Detection method: Fluorescence (Ex/Em = 400/505 nm).

Caspase-3 Inhibitor Drug Screening Kit

K2159

The Caspase-3 Inhibitor Drug Screening Kit (Fluorometric) provides a simple, fast and convenient way for screening of Caspase-3 inhibitors based on fluorometric method.

Size: 100 assays.

Sample type: Cell samples treated with caspase inhibitor drugs.

Species reactivity: Mammalian.

Detection method: Fluorescence (Ex/Em = 400/505 nm).

Caspase-4 Inhibitor Drug Screening Kit

K2160

The Caspase-4 Inhibitor Drug Screening Kit (Fluorometric) provides a simple, fast and convenient way for screening of Caspase-4 inhibitors based on fluorometric method.

Size: 100 assays.

Sample type: Cell samples treated with caspase inhibitor drugs.

Species reactivity: Mammalian.

Detection method: Fluorescence (Ex/Em = 400/505 nm).

Caspase-5 Inhibitor Drug Screening Kit

K2161

The Caspase-5 Inhibitor Drug Screening Kit (Fluorometric) provides a simple, fast and convenient way for screening of Caspase-5 inhibitors based on fluorometric method.

Size: 100 assays.

Sample type: Cell samples treated with caspase inhibitor drugs.

Species reactivity: Mammalian.

Detection method: Fluorescence (Ex/Em = 400/505 nm).

Caspase-6 Inhibitor Drug Screening Kit

K2162

The Caspase-6 Inhibitor Drug Screening Kit (Fluorometric) provides a simple, fast and convenient way for screening of Caspase-6 inhibitors based on fluorometric method.

Size: 100 assays.

Sample type: Cell samples treated with caspase inhibitor drugs.

Species reactivity: Mammalian.

Detection method: Fluorescence (Ex/Em = 400/505 nm).

Caspase-7 Inhibitor Drug Screening Kit

K2163

The Caspase-7 Inhibitor Drug Screening Kit (Fluorometric) provides a simple, fast and convenient way for screening of Caspase-7 inhibitors based on fluorometric method.

Size: 100 assays.

Sample type:
Cell samples treated with caspase inhibitor drugs.

Species reactivity:
Mammalian.

Detection method:
Fluorescence (Ex/Em = 400/505 nm).

Caspase-8 Inhibitor Drug Screening Kit

K2164

The Caspase-8 Inhibitor Drug Screening Kit (Fluorometric) provides a simple, fast and convenient way for screening of Caspase-8 inhibitors based on fluorometric method.

Size: 100 assays.

Sample type:
Cell samples treated with caspase inhibitor drugs.

Species reactivity:
Mammalian.

Detection method:
Fluorescence (Ex/Em = 400/505 nm).

Caspase-9 Inhibitor Drug Screening Kit

K2165

The Caspase-9 Inhibitor Drug Screening Kit (Fluorometric) provides a simple, fast and convenient way for screening of Caspase-9 inhibitors based on fluorometric method.

Size: 100 assays.

Sample type:
Cell samples treated with caspase inhibitor drugs.

Species reactivity:
Mammalian.

Detection method:
Fluorescence (Ex/Em = 400/505 nm).

Caspase-10 Inhibitor Drug Screening Kit

K2166

The Caspase-10 Inhibitor Drug Screening Kit (Fluorometric) provides a simple, fast and convenient way for screening of Caspase-10 inhibitors based on fluorometric method.

Size: 100 assays.

Sample type:
Cell samples treated with caspase inhibitor drugs.

Species reactivity:
Mammalian.

Detection method:
Fluorescence (Ex/Em = 400/505 nm).

Caspase-10 Colorimetric Assay Kit

K2197

The Caspase-10 Colorimetric Assay Kit provides a fast and simple means for assaying the activity of caspases that recognize the sequence AEVD.

Size: 25 assays, 100 assays, 200 assays, 400 assays.

Sample type:
Cell and tissue lysates.

Species reactivity:
Mammalian.

Detection method:
Absorbance (400 or 405 nm).

Caspase-5 Fluorometric Assay Kit

K2195

The Caspase-5 Fluorometric Assay Kit provides a fast and convenient means to assay the activity of Caspase-5 and other related caspases. These caspases can recognize the sequence WEHD.

Size: 25 assays, 100 assays, 200 assays, 400 assays.

Sample type:
Cell and tissue lysates.

Species reactivity:
Mammalian.

Detection method:
Fluorescence (Ex/Em = 400/505 nm).

Caspase-5 Colorimetric Assay Kit

K2196

The Caspase-5 Colorimetric Assay Kit provides a fast and convenient means for assaying the activity of Caspase-5 and other related caspases. These caspases can recognize the sequence WEHD.

Size: 25 assays, 100 assays, 200 assays, 400 assays.

Sample type:
Cell and tissue lysates.

Species reactivity:
Mammalian.

Detection method:
Absorbance (400 or 405 nm).

Caspase-4 Colorimetric Assay Kit

K2199

The Caspase-4 Fluorometric Assay Kit provides a fast and simple means to assay the activity of caspases that recognize the sequence LEVD.

Size: 25 assays, 100 assays, 200 assays, 400 assays.

Sample type:
Cell and tissue lysates.

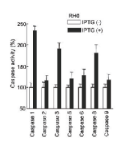
Species reactivity:
Mammalian.

Detection method:
Absorbance (400 or 405 nm).

Caspase Colorimetric Substrate Set

K2203

Caspase Colorimetric Substrate Set is ready-to-use for members of caspase family proteases.



Caspase activities of IPTG-treated RH0 cells were analyzed by Caspase Colorimetric Substrate Set.

Size: 7 x 25 assays.

Sample type:
Cell culture.

Species reactivity:
Mammalian.

Detection method:
Absorbance (400 or 405 nm).

Caspase-4 Fluorometric Assay Kit — K2198

The Caspase-4 Fluorometric Assay Kit provides a fast and simple means to assay the activity of caspases that recognize the sequence LEVD.

Size: 25 assays, 100 assays, 200 assays, 400 assays.

Sample type: Cell and tissue lysates.

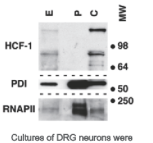
Species reactivity: Mammalian.

Detection method: Fluorescence (Ex/Em = 400/505 nm).

Protein preparation related

Cytosol/Particulate Separation Kit — K2112

The Cytosol/Particulate Rapid Separation Kit separates cytosol from particulate compartments rapidly through an oil layer to avoid the contact or diffusion of two fractions.



Cultures of DRG neurons were fractionated by Cytosol/Particulate Separation Kit.

Size: 50 assays.

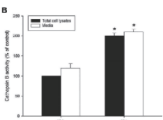
Sample type: Cell culture (adherent and suspension), fresh and frozen tissues.

Species reactivity: Mammalian.

Cathepsin Related

Cathepsin B Activity Fluorometric Assay Kit — K2151

The Cathepsin B Activity Fluorometric Assay Kit provides a sensitive, simple and convenient way for detection of Cathepsin B activity based on fluorometric method.



Cathepsin B activities in cell lysates and media supernatants.

Size: 100 assays.

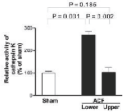
Sample type: Cell and tissue lysates.

Species reactivity: Mammalian.

Detection method: Fluorescence (Ex/Em = 400/505 nm) and fluorometer.

Cathepsin K Activity Fluorometric Assay Kit — K2152

The Cathepsin K Activity Fluorometric Assay Kit provides a sensitive, simple and convenient way for detection of Cathepsin K activity based on fluorometric method.



Enzyme activities of Cathepsin K of Inferior Vena Cava (IVC).

Size: 100 assays.

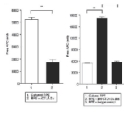
Sample type: Cell and tissue lysates.

Species reactivity: Mammalian.

Detection method: Fluorescence (Ex/Em = 400/505 nm).

Cathepsin L Activity Fluorometric Assay Kit — K2153

The Cathepsin L Activity Fluorometric Assay Kit provides a sensitive, simple and convenient way for detection of Cathepsin L activity based on fluorometric method.



Cathepsin L activity in RPE cells.

Size: 100 assays.

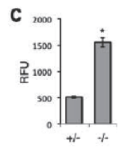
Sample type: Cell and tissue lysates.

Species reactivity: Mammalian.

Detection method: Fluorescence (Ex/Em = 400/505 nm).

Cathepsin D Activity Fluorometric Assay Kit — K2154

The Cathepsin D Activity Fluorometric Assay Kit provides a sensitive, simple and convenient way for detection of Cathepsin D activity based on fluorometric method.



Cathepsin D (CTSD) activity was assayed using homogenates (250 ng of protein) from the cerebral cortex of 21-day-old Nestin-flox/flox (-/-) and Nestin-flox/wt (+/-) mice.

Size: 100 assays.

Sample type: Cell and tissue lysates.

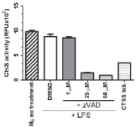
Species reactivity: Mammalian.

Detection method: Fluorescence (Ex/Em = 328/460 nm).

Cathepsin S Activity Fluorometric Assay Kit

K2155

The Cathepsin S Activity Fluorometric Assay Kit provides a sensitive, simple and convenient way for detection of Cathepsin S activity based on fluorometric method.



Cathepsin S (CTSS) activity in Macrophages.

Size: 100 assays.

Sample type: Cell and tissue lysates.

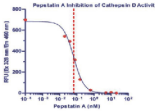
Species reactivity: Mammalian.

Detection method: Fluorescence (Ex/Em = 400/505 nm).

Cathepsin D Inhibitor Screening Kit

K2156

The Cathepsin D Inhibitor Screening Kit (Fluorometric) provides a simple, fast and convenient way for screening of Cathepsin D inhibitors based on fluorometric method.



Typical Pepstatin A Inhibition Profile of Cathepsin D Activity.

Size: 100 assays.

Sample type: Cell and tissue lysates.

Species reactivity: Mammalian.

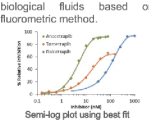
Detection method: Fluorescence (Ex/Em = 328/460 nm).

CETP Related

CETP Inhibitor Drug Screening Kit

K2088

The CETP Inhibitor Drug Screening Kit (Fluorometric) provides a sensitive, simple and convenient way for screening of CETP inhibitors in various biological fluids based on fluorometric method.



Semi-log plot using best fit 4-parameter regression to compare inhibition of Enriched Human CETP by Anacetrapib, Torcetrapib and Dalcetrapib.

Size: 100 assays.

Sample type: Cell and tissue culture supernatants, urine, plasma, serum, as well as many other biological fluids.

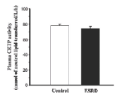
Species reactivity: Mammalian.

Detection method: Fluorescence (Ex/Em = 480/511 nm).

CETP Activity Fluorometric Assay Kit

K2089

The CETP Activity Fluorometric Assay Kit provides a simple and convenient way for detection of CETP activity in various samples based on fluorometric method.



CETP activity in haemodialysis-dependent end-stage renal disease (ESRD) patients.

Size: 100 assays.

Sample type: Animal serum, plasma and recombinant protein.

Species reactivity: N/A.

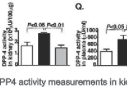
Detection method: Fluorescence (Ex/Em = 480/511 nm).

DPP4 Related

DPP4 Activity Fluorometric Assay Kit

K2178

The DPP4 Activity Fluorometric Assay kit provides a fast, selective and robust way for high throughput activity screening of DPP4.



DPP4 activity measurements in kidney (P) and plasma (Q) were analyzed by DPP4 Activity Fluorometric Assay Kit.

Size: 100 assays.

Sample type: Cell and tissue culture lysates, plasma, serum, other biological fluids, cell culture medium, etc.

Species reactivity: Mammalian.

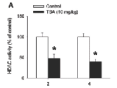
Detection method: Fluorescence (Ex/Em = 360/460 nm).

HDAC Related

HDAC Activity Fluorometric Assay Kit

K2031

The HDAC Activity Fluorometric Assay Kit provides a fast and convenient way for detection of HDAC activity based on fluorescence method that eliminates radioactivity, chromatography or extractions in traditional assays.



Treatment of rats with Trichostatin A (TSA) reduces HDAC activity in skeletal muscle.

Size: 100 assays.

Sample type: Cell lysate, nuclear extract.

Species reactivity: Mammalian.

Detection method: Fluorescence (Ex/Em = 350 - 380/440 - 460 nm).

HDAC Activity Colorimetric Assay Kit

K2032

The HDAC Activity Colorimetric Assay Kit provides a fast and convenient way for detection of HDAC activity based on colorimetric method that eliminates radioactivity, chromatography or extractions in traditional assays.

HDAC activity assay.

Size: 100 assays.

Sample type:
Cell lysate, nuclear extract.

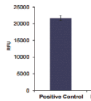
Species reactivity:
Mammalian.

Detection method:
Absorbance (400 or 405 nm).

HDAC Inhibitor Drug Screening Kit

K2038

The HDAC Inhibitor Drug Screening Kit (Fluorometric) provides a fast and convenient way for screening of compounds for HDAC inhibition by detecting HDAC activity based on fluorescence method that eliminates radioactivity, chromatography or extractions in traditional assays.



Set the RFU of positive control as the 100%, and calculate the relative activity remains with candidate compounds.

Size: 100 assays.

Sample type:
Cell and tissue lysates, culture media, urine, plasma and serum, as well as many other biological fluids.

Species reactivity:
Mammalian.

Detection method:
Fluorescence (Ex/Em = 350 - 380/440 - 460 nm).

JNK Related

KinaseSTAR JNK Activity Screening Kit

K2078

The KinaseSTAR JNK Activity Screening Kit provides a simple and convenient way for screening of JNK activity based on Western Blot method.

Reduction of JNK1 mRNA levels results in similar degree of reduction in JNK1 activity.

Size: 40 assays.

Sample type:
Cell and tissue lysates.

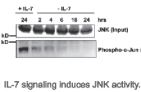
Species reactivity:
Mammalian.

Detection method: Western blot analysis with anti-Phospho-cJun (Ser 73) Specific Antibody at 1:1000 dilutions.

KinaseSTAR JNK Activity Assay Kit

K2079

The KinaseSTAR JNK Activity Assay Kit provides a specific and simple way for detection of JNK activity based on Western Blot method.



IL-7 signaling induces JNK activity.

Size: 40 assays.

Sample type:
Cell and tissue lysates.

Species reactivity:
Mammalian.

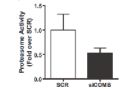
Detection method: Western blot analysis with anti-Phospho-c Jun (Ser 73) Specific Antibody at 1:1000 dilutions.

Proteasome Related

Proteasome Activity Fluorometric Assay Kit

K2096

The Proteasome Activity Assay utilized the chymotrypsin-like activity with an AMC-tagged peptide substrate that releases free, highly fluorescent AMC in the presence of proteolytic activity.



Silencing of the proteasome 20S subunits in combination (siCOMB) moderately reduces proteasome activity compared with the control.

Size: 100 assays.

Sample type:
Whole cell lysates, nuclear and cytoplasmic lysates.

Species reactivity:
Mammalian.

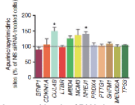
Detection method:
Fluorescence (Ex/Em = 350/440 nm).

Apoptosis Related

DNA Damage Quantification Colorimetric Kit

K2100

The kit utilizes the ARP (Aldehyde Reactive Probe) reagent that reacts with aldehyde group of the AP sites. Biotin residues are tagged onto the AP sites. The biotin-tagged AP sites can be quantified by avidin-biotin assay and colorimetric detection.



Increased levels of DNA damage determined by quantification of AP sites.

Size: 25 assays.

Sample type: N/A.

Species reactivity:
Mammalian.

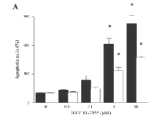
Detection method:
Absorbance (450 and 650 nm).

Kits

Quick Apoptotic DNA Ladder Detection Kit

K2194

DNA fragmentation in apoptotic cells can be detected easily and sensitively by the Quick Apoptotic DNA Ladder Detection Kit.



Effect of BAY 11-7085 on apoptosis of ECSCs and NESCs.

Size: 50 assays.

Sample type: Cells.

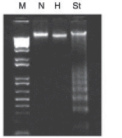
Species reactivity: Mammalian.

Detection method: Agarose gel with ethidium bromide.

Enhanced Apoptotic DNA Ladder Detection Kit

K2202

The Enhanced Apoptotic DNA Ladder Detection Kit provides a sensitive and easy means for detecting DNA fragmentation in apoptotic cells.



No apoptosis during transient hypoxia.

Size: 50 assays.

Sample type: DNA from all cell types and tissues undergoing apoptosis.

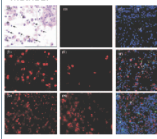
Species reactivity: Mammalian.

Detection method: Agarose gel electrophoresis.

ApoBrdU-IHC DNA Fragmentation Assay Kit

K2072

The ApoBrdU-IHC DNA Fragmentation Assay Kit provides a simple and convenient way for detection of DNA fragmentation in fixed cell preparations or tissue sections based on immunohistochemistry method.



Apoptosis during EAAU.

Size: 50 assays.

Sample type: Tissue sections and fixed cell preparations.

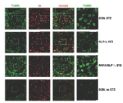
Species reactivity: Mammalian.

Detection method: Immunohistochemistry.

Apo-BrdU DNA Fragmentation Assay Kit

K2070

The BrdU In Situ DNA Fragmentation Assay Kit provides a simple and convenient way for detection of DNA fragmentation in biological samples based on fluorescence microscopy or flow cytometry method.



The mTOR-HIF pathway mediates effects of GLP-1 on islet cell viability.

Size: 60 assays.

Sample type: Cell culture (adherent and suspension), parafin embedded tissue sections.

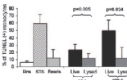
Species reactivity: Mammalian.

Detection method: Flow cytometry (Ex/Em = 488/520 nm for FITC, and 488/623 nm for PI) and fluorescence microscopy (FITC and rhodamine filters).

ApoBrdU Red DNA Fragmentation Kit

K2073

The Apo-BrdU Red DNA Fragmentation Kit provides a simple and convenient way for detection of DNA fragmentation in fixed cell preparations or tissue sections based on fluorescence microscopy or flow cytometry method.



Live B. burgdorferi induces DNA fragmentation predominantly in monocytes containing spirochetes.

Size: 60 assays.

Sample type: Tissue sections and fixed cell preparations.

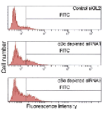
Species reactivity: Mammalian.

Detection method: Flow cytometry (Ex/Em = 488/576 nm for BrdU-Red and 488/655 nm for 7-AAD).

ApoDIRECT DNA Fragmentation Assay Kit

K2071

The ApoDIRECT DNA Fragmentation Assay Kit provides a simple and convenient way for detection of DNA fragmentation in biological samples based on fluorescence microscopy or flow cytometry method.



Antiapoptotic effects of αB-crystallin were assessed by flow cytometry.

Size: 50 assays.

Sample type: Cell culture (adherent and suspension).

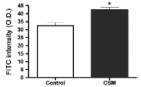
Species reactivity: Mammalian.

Detection method: Flow cytometry (Ex/Em = 488/520 nm for FITC, and 488/623 nm for PI) and fluorescence microscopy (FITC and Rhodamine filters).

Annexin V-Biotin Apoptosis Kit

K2009

The Annexin V-Biotin Apoptosis Detection Kit uses a fluorescent conjugate of Annexin V that can easily detect PS on the cell surface after initiating apoptosis.



Apoptosis assays in MCF-7 cells stimulated with oncostatin M (OSM).

Size: 25 assays, 100 assays, 400 assays.

Sample type: Living cells (suspension and adherent).

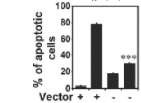
Species reactivity: Mammalian.

Detection method: Flow cytometry (Ex/Em = 488/530 nm) and fluorescence microscopy.

Annexin V-PE Apoptosis Detection Kit

K2200

The Annexin V-PE Apoptosis Detection Kit uses a fluorescent conjugate of Annexin V that can easily detect PS on the cell surface after initiating apoptosis.



Cell apoptosis were measured by the Annexin V-PE Apoptosis Detection Kit.

Size: 25 assays, 100 assays, 400 assays.

Sample type: Living cells.

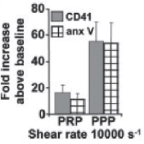
Species reactivity: Mammalian.

Detection method: Flow cytometry (Ex/Em = 488/578 nm) and fluorescence microscopy.

Annexin V-PE-Cy5 Apoptosis Detection

K2201

The Annexin V-PE-Cy5 Apoptosis Detection uses a fluorescent conjugate of Annexin V that can easily detect PS on the cell surface after initiating apoptosis.



The number of microparticles positive for CD41 was measured by Annexin V binding.

Size: 25 assays, 100 assays, 400 assays.

Sample type: Living cells.

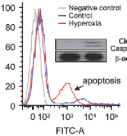
Species reactivity: Mammalian.

Detection method: Flow cytometry (Ex/Em = 488/670 nm) and fluorescence microscopy.

Annexin V-FITC Apoptosis Assay Kit

K2203

The Annexin V-FITC Apoptosis Detection Kit uses a fluorescent conjugate of Annexin V that can easily detect PS on the cell surface after initiating apoptosis.



Effect of LC3B in hyperoxia-induced epithelial cell apoptosis.

Size: 25 assays, 100 assays, 400 assays.

Sample type: Living cells (suspension and adherent).

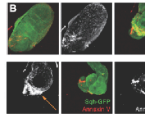
Species reactivity: Mammalian..

Detection method: Flow cytometry (Ex/Em = 488/530 nm) and fluorescence microscopy.

Annexin V-Cy3 Apoptosis Assay Kit

K2204

The Annexin V-Cy3 Apoptosis Detection Kit uses a fluorescent conjugate of Annexin V that can easily detect PS on the cell surface after initiating apoptosis.



Further applications of ex vivo culture.

Size: 25 assays, 100 assays, 400 assays.

Sample type: Living cells (suspension and adherent).

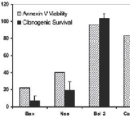
Species reactivity: Mammalian.

Detection method: Flow cytometry (Ex/Em = 543/570 nm) and fluorescence microscopy.

Annexin V-Cy5 Apoptosis Assay Kit

K2205

The Annexin V-Cy5 Apoptosis Detection Kit uses a fluorescent conjugate of Annexin V that can easily detect PS on the cell surface after initiating apoptosis.



Protein levels, caspase activity and cell death in FL5 cell lines.

Size: 25 assays, 100 assays, 400 assays.

Sample type: Living cells (suspension and adherent).

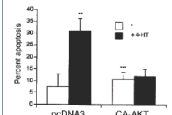
Species reactivity: Mammalian.

Detection method: Flow cytometry (Ex/Em = 649/670 nm) and fluorescence microscopy.

Annexin V-EGFP Apoptosis Kit

K2006

The Annexin V-EGFP Apoptosis Kit uses an EGFP fusion of annexin V that can easily detect PS on the cell surface after initiating apoptosis.



Akt inhibits 4-HT-induced apoptosis.

Size: 25 assays, 100 assays, 400 assays.

Sample type: Living cells (suspension and adherent).

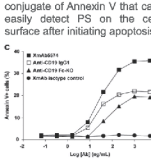
Species reactivity: Mammalian.

Detection method: Flow cytometry (Ex/Em = 488/530 nm) and fluorescence microscopy.

Annexin V-PE Apoptosis Kit Plus

K2059

The Annexin V-PE Apoptosis Kit Plus uses a fluorescent conjugate of Annexin V that can easily detect PS on the cell surface after initiating apoptosis.



Apoptosis was assayed by Annexin V-PE Apoptosis Kit Plus and fluorescence was analyzed by flow cytometry.

Size: 25 assays, 100 assays, 400 assays.

Sample type: Living cells .

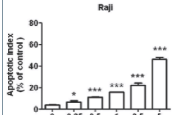
Species reactivity: Mammalian.

Detection method: Flow cytometry using FL1 channel for SYTOX Green dye (Ex/Em = 488/530 nm) and FL2 channel for Annexin V-PE (Ex /Em = 488/578 nm).

Annexin V-FITC Apoptosis Kit Plus

K2057

The Annexin V-FITC Apoptosis Kit Plus uses a fluorescent conjugate of Annexin V that can easily detect PS on the cell surface after initiating apoptosis.



Apoptosis of Raji cells exposed to different concentrations of Japonicone A.

Size: 25 assays, 100 assays, 400 assays.

Sample type: Living cells.

Species reactivity: Mammalian.

Detection method: Flow cytometry (Ex/Em = 488/530 nm).

Cytochrome c Apoptosis Assay Kit

K2104

The Cytochrome c Releasing Apoptosis Assay Kit gives an efficient way for sensing cytochrome c releasing from mitochondria into cytosol under apoptosis.

Mitochondrial and cytoplasmic fractionation was isolated by the Cytochrome c Releasing Apoptosis Assay Kit.

Size: 100 assays.

Sample type: Cells and tissues.

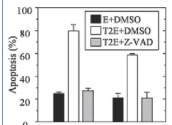
Species reactivity: Mammalian.

Detection method: Western blotting.

Annexin V-Cy3 Apoptosis Kit Plus

K2058

The Annexin V-Cy3 Apoptosis Kit Plus uses a fluorescent conjugate of Annexin V that can easily detect PS on the cell surface after initiating apoptosis.



T2E-induced apoptosis is blocked by Z-VAD-FMK.

Size: 25 assays, 100 assays, 400 assays.

Sample type: Living cells.

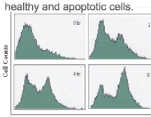
Species reactivity: Mammalian.

Detection method: Flow cytometry (Ex/Em = 543/570 nm).

Mitochondrial Apoptosis Detection Fluorometric Kit

K2097

The Mitochondrial Apoptosis Detection Fluorometric kit is an easy and fluorescent-based way for differentiating between healthy and apoptotic cells.



Mitochondrial Apoptosis Detection Fluorometric Kit effectively detects disruption of mitochondrial transmembrane potential in apoptotic cells.

Size: 25 assays, 100 assays.

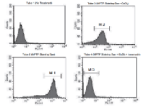
Sample type: Living cells.

Species reactivity: Mammalian.

Detection method: Fluorescence microscopy and Flow cytometry: FITC (Ex/Em = 488/530 ± 30 nm); and (optional) PI (Em. = 488/590 ± 42 nm).

Mitochondrial Permeability Transition Pore Assay Kit — K2061

The Mitochondrial Permeability Transition Pore Assay Kit gives a direct method of measuring cell death by measuring MPTP opening.



Jurkat cells were incubated with the reagents of the Mitochondrial Permeability Transition Pore Assay Kit.

Size: 100 assays.

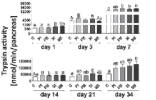
Sample type: Cells (adherent and suspension).

Species reactivity: Mammalian.

Detection method: Flow cytometry (Ex. = 488 nm).

Trypsin Activity Colorimetric Assay Kit — K2176

Trypsin is a serine protease that hydrolyses proteins in the digestive system of various vertebrates. Trypsin activity can be measured as the color intensity is proportional to p-NA content.



The influence of Prebiotics and Synbiotics on total activity of pancreatic trypsin measured by the Trypsin Activity Colorimetric Assay Kit.

Size: 100 assays.

Sample type: Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids.

Species reactivity: Mammalian.

Detection method: Absorbance (405 nm).

Granzyme B Activity Fluorometric Assay Kit — K2001

The Granzyme B Activity Assay Kit can be used in different biological samples, it hydrolyzes the specific substrate to release the quench of fluorescent group, which can be detected fluorometrically at Ex/Em = 380/500 nm.

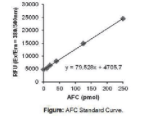


Figure: AFC Standard Curve.

The activity of Granzyme B was calculated in the test sample.

Size: 100 assays.

Sample type: N/A.

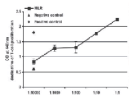
Species reactivity: N/A.

Detection method: Fluorescence (Ex/Em = 380/500 nm).

Cell Proliferation Related

WST-1 Cell Proliferation Colorimetric Assay Kit — K2021

The WST-1 Cell Proliferation Colorimetric Assay Kit provides a fast and sensitive way for quantification of cell proliferation and viability.



BM-derived CD11c+ cells are bonafide DC.

Size: 500 assays, 2500 assays.

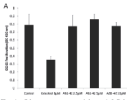
Sample type: Cell culture (adherent and suspension).

Species reactivity: Mammalian.

Detection method: Absorbance (420 - 480 nm).

WST Cell Proliferation Colorimetric Assay Kit plus — K2022

The WST Cell Proliferation Colorimetric Assay Kit plus provides the easiest and most sensitive way for quantification of cell proliferation and viability.



Effect of human recombinant Aβ1-42 on the proliferation of GL261 tumor cells.

Size: 500 assays, 2500 assays.

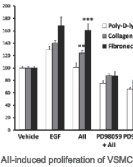
Sample type: Cell culture (adherent and suspension).

Species reactivity: Mammalian.

Detection method: Absorbance (420 - 480 nm).

ApexBlue™ Quick Cell Viability Fluorometric Assay Kit — K2023

The ApexBlue™ Quick Cell Viability Fluorometric Assay Kit provides the easiest and most sensitive way for quantification of cell proliferation and viability.



AII-induced proliferation of VSMC is dependent on integrin-mediated adhesion and ERK activity.

Size: 500 assays, 2500 assays.

Sample type: Cell culture (adherent and suspension).

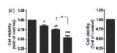
Species reactivity: Mammalian.

Detection method: Fluorescence (Ex/Em = 530 - 570/590 - 620 nm).

Ready-to-use Cell Proliferation Reagent, WST-1

K2024

The ready-to-use cell proliferation reagent, WST-1 provides an accurate and simple way for quantification of cell proliferation.



TG and TM causes cell death.

Size: 2500 assays.

Sample type:
Cell culture (adherent and suspension).

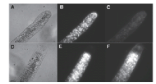
Species reactivity:
Mammalian.

Detection method:
Absorbance (440 nm).

Live-Dead Cell Staining Kit

K2081

The Live-Dead Cell Staining Kit provides a fast and convenient way for discrimination between live and dead cells in cell culture based on fluorometric method.



Bright-field and fluorescent micrographs of stolon tips from colonies of P. carnea.

Size: 100 stainings.

Sample type:
Cell culture (adherent and suspension cells).

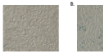
Species reactivity:
Mammalian.

Detection method:
Fluorescent microscopy (Ex/Em = 488/518 nm) to detect staines Living cells; (Ex/Em = 488/615 nm) to detect stained dead cells.

Senescence Detection Kit

K2030

The Senescence Detection Kit provides a fast and convenient way for detection of senescence based on histochemical detection of SA-β-Gal activity in cultured cells and tissues.



Hydrogen peroxide induces senescence in HeLa cells.

Size: 250 stainings.

Sample type:
Cultured cells, tissues.

Species reactivity:
Mammalian.

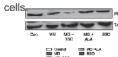
Detection method:
Histochemical.

Cell Fractionation Related

Membrane Protein Extraction Kit

K2113

The Membrane Protein Extraction Kit contains optimized buffers and reagents for fast and convenient extraction of membrane proteins from mammalian tissues and cells.



Adipose tissue plasma membrane was isolated with the Membrane Protein Extraction Kit.

Size: 50 assays.

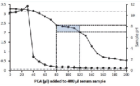
Sample type:
Cell culture (adherent and suspension), fresh and frozen tissues.

Species reactivity:
Mammalian.

Deproteinizing Sample Preparation Kit

K2184

The Deproteinizing Sample Preparation Kit applies a PCA precipitation method, offers a special tool for sample preparation in various small molecules.



Deproteinization of serum samples.

Size: 200 assays.

Sample type:
Cell and tissue culture homogenates (eukaryotic cells), serum, plasma and high protein samples.

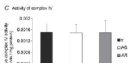
Species reactivity:
Mammalian.

Metabolism Assay Related

Cytochrome Oxidase Activity Colorimetric Assay Kit

K2020

The Cytochrome Oxidase Activity Colorime-tric Assay Kit is fast, simple and high-throughput adaptable. This assay kit can be used for cells and tissue extracts containing mitochondria or purified mitochondria.



Mitochondrial energy production machinery unchanged with aging and resveratrol treatment in the heart.

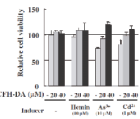
Size: 100 assays.

Sample type:
Purified mitochondria. Cells/tissue extracts.

LDH-Cytotoxicity Colorimetric Assay Kit

K2025

The LDH-Cytotoxicity Colorimetric Assay Kit provides a simple and fast way for the quantification of cytotoxicity based on the measurement of activity of LDH released from damaged cells.



The protection of HeLa cells from the cell toxicity of hemin, arsenite and cadmium by treatment with DCFH-DA.

Size: 400 assays.

Sample type:
Cell culture (adherent and suspension).

Species reactivity:
Mammalian.

Detection method:
Absorbance (500 nm).

AK Bioluminescence Cytotoxicity Assay Kit

K2026

The AK Bioluminescence Cytotoxicity Assay Kit provides a simple and fast way for the quantification of cytotoxicity based on the measurement of AK involving two chemical reactions.

Size: 500 assays.

Sample type: Cell culture (adherent and suspension).

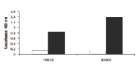
Species reactivity: Mammalian.

Detection method: Luminescence.

LDH-Cytotoxicity Colorimetric Assay Kit II

K2027

The LDH-Cytotoxicity Colorimetric Assay Kit II provides a simple and fast way for the quantification of cytotoxicity based on the measurement of activity of LDH released from damaged cells.



LDH Cytotoxicity Assay Kit II.

Size: 500 assays.

Sample type: Cell culture (adherent and suspension).

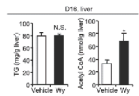
Species reactivity: Mammalian.

Detection method: Absorbance (450 nm).

Acetyl-CoA Fluorometric Assay Kit

K2028

The Acetyl-CoA Fluorometric Assay Kit provides a convenient and highly sensitive way for the quantification of Acetyl CoA level in variety of biological samples.



Parameter of lipid metabolism in D16 offspring.

Size: 100 assays.

Sample type: Cell and tissue lysates, culture media, urine, plasma and serum, as well as many other biological fluids.

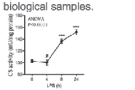
Species reactivity: Mammalian.

Detection method: Fluorescence (Ex/Em = 535/587 nm).

Citrate Synthase Activity Colorimetric Assay Kit

K2029

The Citrate Synthase Activity Colorimetric Assay Kit provides a simple and convenient way for the quantification of citrate synthase activity in a variety of biological samples.



Mitochondrial biogenesis and enzyme activation increase with inflammation adaptation.

Size: 100 assays.

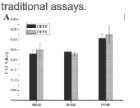
Sample type: Animal tissues: liver, heart, kidney, etc. Cell culture: Adherent or suspension cells. Purified mitochondria.

Detection method: Absorbance (412 nm).

HAT Activity Colorimetric Assay Kit

K2033

The HAT Activity Colorimetric Assay Kit provides a fast and sensitive way for detection of HAT activity in mammalian samples based on colorimetric method that eliminates radioactivity in traditional assays.



Global HAT activity from nuclear extract samples.

Size: 100 assays.

Sample type: Cell and Tissue lysates.

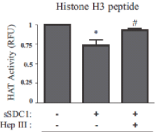
Species reactivity: Mammalian.

Detection method: Absorbance (440 nm).

HAT Activity Fluorometric Assay Kit

K2034

The HAT Activity Fluorometric Assay Kit provides a fast and sensitive way for detection of HAT activity in a variety of samples based on fluorometric method that eliminates radioactivity in traditional assays.



Shed syndecan-1 downregulates histone acetyltransferase activity.

Size: 100 assays.

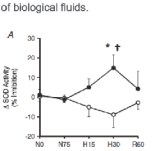
Sample type: Nuclear extracts from cells and tissue. Recombinant enzyme.

Detection method: Fluorescence (Ex/Em = 535/587 nm).

Superoxide Dismutase (SOD) Activity Assay Kit

K2035

The Superoxide Dismutase (SOD) Activity Assay Kit provides a sensitive and convenient way for detection of SOD activity based on a colorimetric method in a variety of biological fluids.



Fetal plasma SOD activity.

Size: 100 assays.

Sample type: Cell and tissue lysates, culture media, urine, plasma and serum, as well as many other biological fluids.

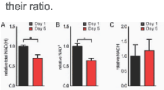
Species reactivity: Mammalian.

Detection method: Absorbance (450 nm).

NAD/NADH Quantitation Colorimetric Kit

K2036

The NAD/NADH Quantitation Colorimetric Kit provides a sensitive and convenient way for detection of the intracellular nucleotides: NADH, NAD and their ratio.



NAD+ levels decrease during keratinocyte differentiation.

Size: 100 assays.

Sample type:
Cell and tissue lysates, culture media, urine, plasma and serum, as well as many other biological fluids.

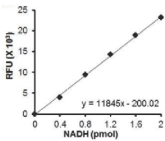
Species reactivity:
Mammalian.

Detection method:
Absorbance (450 nm).

NADH Fluorometric Assay Kit

K2037

The NADH Fluorometric Assay Kit provides a highly sensitive and convenient way for detection of low level NADH in samples or in enzymatic reactions based on fluorescence method.



NADH standard curve.

Size: 100 assays.

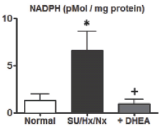
Sample type:
Animal tissues - liver, muscle, heart, etc. Cell culture: adherent or suspension cells. Enzymatic reactions.

Detection method:
Fluorescence (Ex/Em = 535/587 nm).

NADP/NADPH Quantitation Colorimetric Kit

K2039

The NADP/NADPH Quantitation Colorimetric Kit provides a sensitive and convenient way for detection of the intracellular nucleotides: NADP, NADPH and their ratio.



Right ventricular (RV) tissue levels of NADPH in rats.

Size: 100 assays.

Sample type:
Cell and tissue lysates, culture media, urine, plasma and serum, as well as many other biological fluids.

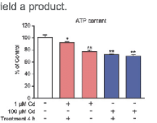
Species reactivity:
Mammalian.

Detection method:
Absorbance (450 nm).

ATP Colorimetric /Fluorometric Assay Kit

K2040

The ATP Colorimetric /Fluorometric Assay Kit provides a robust and simple way for detection of ATP in various samples based on the phosphorylation of glycerol to yield a product.



Cadmium toxicity reduces energy production in cardiomyocytes.

Size: 100 assays.

Sample type:
Cell and tissue lysates, culture media, as well as many other biological fluids.

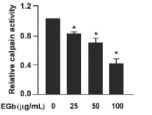
Species reactivity: All.

Detection method:
Absorbance (570 nm) or Fluorescence (Ex/Em = 535/587 nm).

Calpain Activity Fluorometric Assay Kit

K2062

The Calpain Activity Assay Kit is a convenient way of measuring Calpain activity with optimized buffers and reagents.



Macrophages were treated with EGb761 and the Calpain activity was determined by Calpain Activity Fluorometric Assay Kit.

Size: 100 assays.

Sample type:
Cell and tissue lysates.

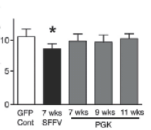
Species reactivity:
Mammalian.

Detection method:
Fluorescence (Ex/Em = 400/505 nm).

Phosphate Colorimetric Assay Kit

K2074

The Phosphate Colorimetric Assay Kit provides a simple, fast and sensitive way for detection of phosphate over a wide range of concentrations in various samples based on colorimetric method.



PGK-PDGFB treatment does not significantly affect serum phosphate level.

Size: 500 assays.

Sample type:
Cell and tissue lysates, culture media, urine, plasma and serum, as well as many other biological fluids, algal blooms and water from run-off areas of high fertilizer use.

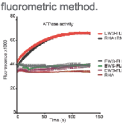
Species reactivity:
Mammalian.

Detection method:
Absorbance (650 nm).

Phosphate Assay Kit (Fluorometric)

K2076

The Phosphate Assay Kit (Fluorometric) provides a highly sensitive, easy and fast way for detection of phosphate (PI) over a wide range of concentrations in various samples based on fluorometric method.



EWS-FLI1 does not inhibit the ATPase activity of RHA.

Size: 100 assays.

Sample type:
Cell and tissue lysates, culture media, urine, plasma and serum, as well as many other biological fluids, algal blooms and water from run-off areas of high fertilizer use.

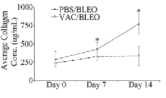
Species reactivity:
Mammalian.

Detection method:
Fluorescence (Ex/Em = 535/587 nm).

Hydroxyproline Colorimetric Assay Kit

K2083

The Hydroxyproline Colorimetric Assay Kit provides a sensitive, simple and convenient way for detection of hydroxyproline in tissue or protein and peptide hydrolysates based on colorimetric method.



Total lung collagen concentration following Bleomycin administration.

Size: 100 assays.

Sample type:
Animal tissues, protein/peptide hydrolysates, serum, and urine.

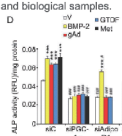
Species reactivity:
Mammalian.

Detection method:
Absorbance (560 nm).

Alkaline Phosphatase Activity Fluorometric Assay Kit

K2077

The Alkaline Phosphatase Activity Fluorometric Assay Kit provides a highly sensitive and convenient way for detection of ALP activity based on fluorometric method in serum and biological samples.



GTDF and gAd-mediated osteoblast differentiation is dependent on PGC-1α and AdipoR1 but not AdipoR2.

Size: 500 assays.

Sample type:
Cell and tissue lysates, culture media, urine, plasma and serum, as well as many other biological fluids.

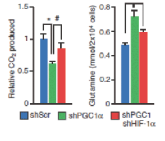
Species reactivity:
Mammalian.

Detection method:
Fluorescence (Ex/Em = 360/440 nm).

Glutamine Colorimetric Assay Kit

K2084

The Glutamine Colorimetric Assay Kit provides a sensitive and simple way for detection of glutamine in various biological samples based on colorimetric method.



Glutamine utilization after PGC1a and HIF1a suppression.

Size: 100 assays.

Sample type:
Serum, plasma, urine or other biological fluids. Mammalian tissues: kidney, liver, brain samples, etc.

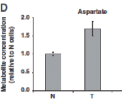
Species reactivity:
Mammalian.

Detection method:
Absorbance (450 nm).

Aspartate Colorimetric /Fluorometric Assay Kit

K2082

The Aspartate Colorimetric /Fluorometric Assay Kit provides a sensitive, simple and convenient way for detection of aspartate in a variety of samples based on colorimetric and fluorometric method.



Relative aspartate concentrations in N, T and R cell lines.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids.

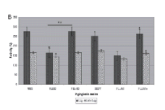
Species reactivity:
Mammalian.

Detection method:
Absorbance (570 nm) or Fluorescence (Ex/Em = 535/587 nm).

Branched Chain Amino Acid (Leu/Ile/Val) Colorimetric Assay Kit

K2085

The Branched Chain Amino Acid (Leu/Ile/Val) Colorimetric Assay Kit provides a sensitive, simple and convenient way for detection of BCAAs in various biological fluids based on colorimetric method.



Estimation of branched-chain amino acids (BCAAs) in P. gingivalis strains.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids.

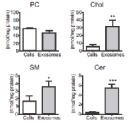
Species reactivity:
Mammalian.

Detection method:
Absorbance (450 nm).

Phosphatidylcholine Colorimetric/Fluorometric Assay Kit

K2086

The Phosphatidylcholine Colorimetric/Fluorometric Assay Kit provides a sensitive, simple and convenient way for detection of phosphatidylcholine in various biological fluids based on colorimetric and fluorometric method.



Exosomal and cellular lipid analysis.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids.

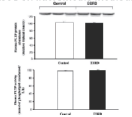
Species reactivity:
Mammalian.

Detection method:
Absorbance (570 nm) or Fluorescence (Ex/Em = 535/587 nm).

PLTP Activity Fluorometric Assay Kit

K2087

The PLTP Activity Fluorometric Assay Kit provides a simple and convenient way for detection of PLTP activity in various samples based on fluorometric method.



PLTP activity was measured by PLTP Activity Fluorometric Assay Kit.

Size: 100 assays.

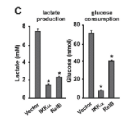
Sample type:
Animal plasma (recommended) or serum. Recombinant protein.

Detection method:
Fluorescence (Ex/Em = 465/535 nm).

Lactate Colorimetric /Fluorometric Assay Kit

K2092

The Lactate Colorimetric /Fluorometric Assay Kit provides a sensitive, simple and convenient way for detection of lactate in various biological samples based on colorimetric and fluorometric method.



Lactate content in media was measured by Lactate Colorimetric/Fluorometric Assay Kit.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids.

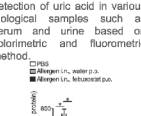
Species reactivity:
Mammalian.

Detection method:
Absorbance (570 nm) or Fluorescence (Ex/Em = 535/587 nm).

Uric Acid Colorimetric /Fluorometric Assay Kit

K2093

The Uric Acid Colorimetric /Fluorometric Assay Kit provides a simple and convenient way for detection of uric acid in various biological samples such as serum and urine based on colorimetric and fluorometric method.



UA in lung homogenates were examined using ELISA by Uric Acid Colorimetric/Fluorometric Assay Kit.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids.

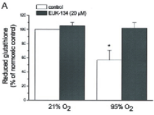
Species reactivity:
Mammalian.

Detection method:
Absorbance (570 nm) or Fluorescence (Ex/Em = 535/587 nm).

Glutathione Fluorometric Assay Kit

K2098

The Glutathione Fluorometric Assay Kit gives a simple in vitro assay for detecting total glutathione changes in apoptosis and other samples.



Primary rat alveolar epithelial cells were exposed to normoxia (21% O_2) or hyperoxia.

Size: 100 assays.

Sample type:
Cell and tissue lysates, culture media, urine, plasma and serum, as well as many other biological fluids.

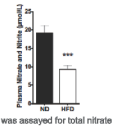
Species reactivity:
Mammalian.

Detection method:
Fluorescence (Ex/Em = 380/461 nm).

Nitric Oxide Fluorometric Assay Kit

K2099

The Nitric Oxide Fluorometric Assay kit is a simple and accurate two-step measurement of total nitrate and nitrite concentration.



Plasma was assayed for total nitrate and nitrite by Nitric Oxide Fluorometric Assay Kit.

Size: 200 assays.

Sample type:
Cell and tissue lysates, culture media, urine, plasma and serum, as well as many other biological fluids.

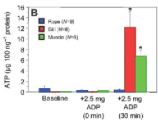
Species reactivity:
Mammalian.

Detection method:
Fluorescence (Ex/Em = 380/461 nm).

ATP Cell Viability Bioluminescence Assay Kit

K2101

The ATP Cell Viability Bioluminescence Assay Kit detects ATP levels by bioluminescent for a fast screening of apoptosis and cell proliferation in mammalian cells.



The ATP concentration in the mitochondria from rope, gill and muscle tissues were determined by ATP cell viability assay kit.

Size: 200 assays, 1000 assays.

Sample type: Cell and tissue lysates, culture media, urine, soil, sludge, plasma and serum, as well as many other biological fluids.

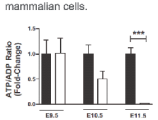
Species reactivity: Mammalian.

Detection method: Luminometer or Beta Counter.

ADP/ATP Ratio Bioluminescence Assay Kit

K2102

The ADP/ATP Ratio Assay Kit detects ATP and ADP levels by bioluminescent for a fast screening of apoptosis, necrosis, growth arrest, and cell proliferation simultaneously in mammalian cells.



ATP/ADP measurements in adrenergic-deficient embryos were performed by ADP/ATP Ratio Bioluminescence Assay Kit.

Size: 200 assays.

Sample type: Cell and tissue lysates, culture media, urine, soil, sludge, plasma and serum, as well as many other biological fluids.

Species reactivity: Mammalian.

Detection method: Luminometer or Beta Counter.

GST Fluorometric Activity Assay Kit

K2105

The GST Fluorometric Activity Assay Kit provides a simple and fluorescence-based in vitro assay for detecting the GST activity using fluorescence plate reader.

Size: 100 assays.

Sample type: Cell and tissue lysates, culture media, urine, plasma and serum, as well as many other biological fluids.

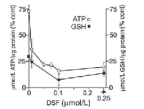
Species reactivity: Mammalian.

Detection method: Fluorescence (Ex/Em = 380/461 nm).

Glutathione Colorimetric Assay Kit

K2106

The Glutathione Colorimetric Assay Kit provides an easy and colorimetic method for analyzing totoal glutathione or the reduced from of glutathione by a microtiter plate reader.



Reduced glutathione (GSH) was analyzed by Glutathione Colorimetric Assay Kit.

Size: 100 assays.

Sample type: Cell and tissue lysates, culture media, urine, plasma and serum, as well as many other biological fluids.

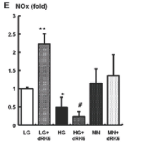
Species reactivity: Mammalian.

Detection method: Absorbance (412 nm).

Nitric Oxide Colorimetric Assay Kit

K2107

The Nitric Oxide Colorimetric Assay kit gives a fast and accurate two-step measurement of total nitrate and nitrite.



The effect of dRK6 (arginine-rich anti-VEGF hexapeptide) on a nitrate/nitrite (NOx) in the HUVECs.

Size: 200 assays.

Sample type: Cell and tissue lysates, culture media, urine, plasma and serum, as well as many other biological fluids.

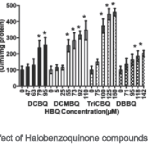
Species reactivity: Mammalian.

Detection method: Absorbance (540 nm).

GST Colorimetric Activity Assay Kit

K2108

The GST Colorimetric Activity Assay Kit can detect GST activity in crude cell lysate, purified protein fraction and quantitate GST-tagged fusion protein.



Effect of Halobenzoquinone compounds on cellular glutathione S-transferase (GST) activity.

Size: 100 assays.

Sample type: Cell and tissue lysates, culture media, urine, plasma and serum, as well as many other biological fluids.

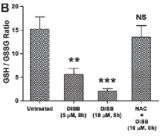
Species reactivity: Mammalian.

Detection method: Absorbance (380 nm).

Glutathione (GSH/GSSG /Total) Fluorometric Assay Kit

K2109

The Glutathione (GSH/GSSG/Total) Fluorometric Assay Kit gives a fast and convenient method for measuring GSH, GSSG and total glutathione separately.



Determination of intracellular GSH level and level of lipid per oxidation during treatment with 3-O, 28-O-disuccinyl betulin.

Size: 100 assays.

Sample type:
Cell and tissue lysates, culture media, urine, plasma and serum, as well as many other biological fluids.

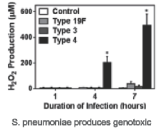
Species reactivity:
Mammalian.

Detection method:
Fluorescence (Ex/Em = 340/420 nm).

Hydrogen Peroxide Assay Kit

K2110

The Hydrogen Peroxide Assay Kit provides a sensitive, easy and direct way for measuring H_2O_2 in biological samples.



S. pneumoniae produces genotoxic levels of H_2O_2.

Size: 200 assays.

Sample type:
Cell and tissue lysates, culture media, urine, plasma and serum, as well as many other biological fluids.

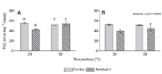
Species reactivity:
Mammalian.

Detection method:
Absorbance (570 nm) and fluorescence (Ex/Em = 535/587 nm).

Total Antioxidant Capacity (TAC) Colorimetric Assay Kit

K2116

The Total Antioxidant Capacity (TAC) Colorimetric Assay Kit can measure both small molecule antioxidants and proteins in combination or small molecules alone with Protein Mask.



Total antioxidant capacity (TAC) of (A) gastrocnemius and (B) iliofibularis muscles in Cyclorana alboguttata.

Size: 100 assays.

Sample type:
Cell and tissue lysates, culture media, urine, plasma and serum, as well as many other biological fluids.

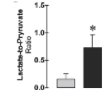
Species reactivity:
Mammalian.

Detection method:
Absorbance (570 nm).

Pyruvate Colorimetric /Fluorometric Assay Kit

K2119

The Pyruvate Colorimetric /Fluorometric Assay Kit provides a simple and convenient way for detection of pyruvate in various biological samples such as culture and fermentation media, blood and cells based on colorimetric and fluorometric method.



Exposure of PASM cells to hypoxia for 72 h increased lactate-to-pyruvate ratio.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids.

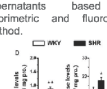
Species reactivity:
Mammalian.

Detection method:
Absorbance (570 nm) or Fluorescence (Ex/Em = 535/587 nm).

Fructose Colorimetric /Fluorometric Assay Kit

K2124

The Fructose Colorimetric /Fluorometric Assay Kit provides a sensitive, fast and convenient way for detection of fructose in cell or tissue culture supernatants based on colorimetric and fluorometric method.



Fructose in aorta of genetically hypertensive rats.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants (Not urine, plasma, serum).

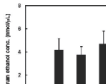
Species reactivity:
Mammalian.

Detection method:
Absorbance (570 nm) or Fluorescence (Ex/Em = 535/587 nm).

Ethanol Colorimetric /Fluorometric Assay Kit

K2125

The Ethanol Colorimetric /Fluorometric Assay Kit provides a sensitive, fast and convenient way for detection of ethanol concentration in various biological samples such as plasma, serum, other body fluids, growth media, foods and beverages based on colorimetric and fluorometric method.



Effect of MO and sesame oil on serum ethanol concentration in addifted ethanol-treated rats.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids.

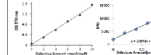
Species reactivity:
Mammalian.

Detection method:
Absorbance (570 nm) or Fluorescence (Ex/Em = 535/587 nm).

Galactose Colorimetric /Fluorometric Assay Kit

K2126

The Galactose Colorimetric /Fluorometric Assay Kit provides a sensitive, fast and convenient way for detection of galactose levels in various biological samples based on colorimetric and fluorometric method.



Galactose standard curve.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids.

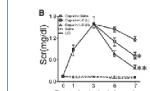
Species reactivity:
Mammalian.

Detection method:
Absorbance (570 nm) or Fluorescence (Ex/Em = 535/587 nm).

Creatinine Colorimetric/ Fluorometric Assay Kit

K2130

The Creatinine Colorimetric /Fluorometric Assay Kit provides a sensitive, fast and convenient way for accurate detection of creatinine levels in various biological fluids based on colorimetric and fluorometric method.



Post cisplatin injury day

Serum creatinine levels decrease at a more rapid rate in Cisplatin + LiCl-treated mice compared with Cisplatin + Saline-treated mice.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids.

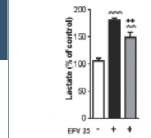
Species reactivity:
Mammalian.

Detection method:
Absorbance (570 nm) or Fluorescence (Ex/Em = 535/587 nm).

Lactate Colorimetric Assay Kit II

K2131

The Lactate Colorimetric Assay Kit II provides a sensitive, simple and convenient way for detection of lactate in various biological samples based on colorimetric method.



Analysis of extra-cellular lactate levels in U-251MG cells.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids, monitoring level during fermentation and feeding in protein expression processes.

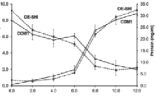
Species reactivity:
Mammalian.

Detection method:
Absorbance (450 nm).

Maltose Colorimetric /Fluorometric Assay Kit

K2132

The Maltose Colorimetric /Fluorometric Assay Kit provides a sensitive, fast and convenient way for detection of maltose in various biological samples based on colorimetric and fluorometric method.



Comparison of growth and maltose consumption by OE-SHI and COM1 strains.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids.

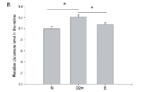
Species reactivity:
Mammalian.

Detection method:
Absorbance (570 nm) or Fluorescence (Ex/Em = 535/587 nm).

Glutamate Colorimetric Assay Kit

K2133

The Glutamate Colorimetric Assay Kit provides a sensitive, fast and convenient way for detection of glutamate in various samples based on colorimetric method.



Intravitreal injection of EPO reduces the retinal Glu level in diabetic rat retinas.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids, monitoring glucose level during fermentation and feeding in protein expression processes.

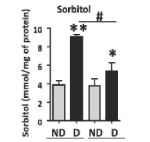
Species reactivity: All.

Detection method:
Absorbance (450 nm).

D-Sorbitol Colorimetric Assay Kit

K2135

The D-Sorbitol Colorimetric Assay Kit provides a simple, fast and convenient way for detection of Sorbitol in various samples based on colorimetric method.



Quantification of renal cortical Sorbitol levels in all groups in nondiabetic and diabetic wild-type mice and khk-/- mice.

Size: 100 assays.

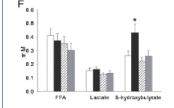
Sample type:
Foods, fruits, fruit juices, pharmaceuticals, cosmetics and paper.

Detection method:
Absorbance (560 nm).

β-Hydroxybutyrate (β-HB) Colorimetric Assay Kit

K2136

The β-Hydroxybutyrate (β-HB) Colorimetric Assay Kit provides a sensitive, fast and convenient way for detection of β-HB levels in various biological samples based on colorimetric method.



DNP effects in liver.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids.

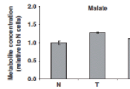
Species reactivity:
Mammalian.

Detection method:
Absorbance (450 nm).

Malate Colorimetric Assay Kit

K2139

The Malate Colorimetric Assay Kit provides a sensitive, fast and convenient way for accurate detection of L(-) Malate levels in various samples based on colorimetric method.



Relative metabolites concentrations in N, T and R cell lines.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids, food, fruits, cheese, beer and wine samples.

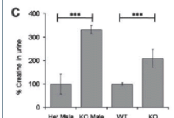
Species reactivity:
Mammalian.

Detection method:
Absorbance (450 nm).

Creatine Colorimetric /Fluorometric Assay Kit

K2137

The Creatine Colorimetric /Fluorometric Assay Kit provides a sensitive, fast and convenient way for accurate detection of creatine levels in various biological fluids based on colorimetric and fluorometric method.



Effect of mutations on Creatine transport and expression studies.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids.

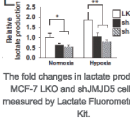
Species reactivity:
Mammalian.

Detection method:
Absorbance (570 nm) or Fluorescence (Ex/Em = 535/587 nm).

Lactate Fluorometric Assay Kit

K2140

The Lactate Fluorometric Assay Kit provides a highly sensitive, simple and convenient way for detection of very low levels of L (+)-lactate in various biological samples based on fluorometric method.



The fold changes in lactate production in MCF-7 LKO and shJMJD5 cells were measured by Lactate Fluorometric Assay Kit.

Size: 100 assays.

Sample type:
Serum and plasma. Animal tissues: liver, muscle, heart, etc. Cell culture: adherent or suspension cells.

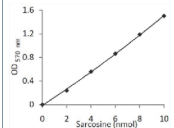
Species reactivity:
Mammalian.

Detection method:
Fluorescence (Ex/Em = 535/587 nm).

Sarcosine Colorimetric /Fluorometric Assay Kit

K2138

The Sarcosine Colorimetric /Fluorometric Assay Kit provides a simple, fast and convenient way for accurate detection of sarcosine levels in various biological samples based on colorimetric and fluorometric method.



Sarcosine standard curve.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, plasma and serum, as well as many other biological fluids.

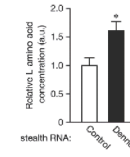
Species reactivity:
Mammalian.

Detection method:
Absorbance (570 nm) or Fluorescence (Ex/Em = 535/587 nm).

L-Amino Acid Quantitation Colorimetric /Fluorometric Kit

K2141

The L-Amino Acid Quantitation Colorimetric/Fluorometric Kit provides a sensitive, fast and convenient way for detection of L-amino acid in various biological samples based on colorimetric and fluorometric method.



Effect of Dennd3 knockdown on the intracellular L-amino acid concentration.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids.

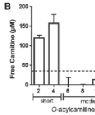
Species reactivity:
Mammalian.

Detection method:
Absorbance (570 nm) or Fluorescence (Ex/Em = 535/587 nm).

L-Carnitine Colorimetric /Fluorometric Assay Kit

K2142

The L-Carnitine Colorimetric /Fluorometric Assay Kit provides a simple, fast and convenient way for detection of free L-carnitine in various biological samples based on colorimetric and fluorometric method.



Free L-carnitine generated from hydrolysis of acylcarnitines by 6 × His-PA5384 was detected by L-Carnitine Colorimetric/Fluorometric Assay Kit.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids.

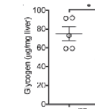
Species reactivity:
Mammalian.

Detection method:
Absorbance (570 nm) or Fluorescence (Ex/Em = 535/587 nm).

Glycogen Colorimetric /Fluorometric Assay Kit

K2143

The Glycogen Colorimetric /Fluorometric Assay Kit provides a sensitive, fast and convenient way for accurate detection of glycogen levels in various biological samples based on colorimetric and fluorometric method.



Liver glycogen in neonatal mice.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids.

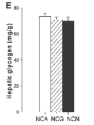
Species reactivity:
Mammalian.

Detection method:
Absorbance (570 nm) or Fluorescence (Ex/Em = 535/587 nm).

Glycogen Colorimetric Assay Kit II

K2144

The Glycogen Colorimetric Assay Kit II provides a simple, fast and convenient way for detection of glycogen levels in various biological samples based on colorimetric method.



Changes in hepatic glycogen after ICV infusion of Ad-shNUCB2.

Size: 100 assays.

Sample type:
Animal tissues: liver, muscle. Cell culture: adherent or suspension cells.

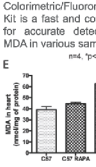
Species reactivity:
Mammalian.

Detection method:
Absorbance (450 nm).

Lipid Peroxidation (MDA) Colorimetric/Fluorometric Assay Kit

K2167

The Lipid Peroxidation (MDA) Colorimetric/Fluorometric Assay Kit is a fast and convenient tool for accurate detection of the MDA in various samples.



Effect of chronic rapamycin treatment on oxidative stress.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, plasma and other biological fluids (optimized by end user).

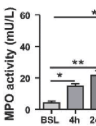
Species reactivity:
Mammalian.

Detection method:
Absorbance (532 nm) or Fluorescence (Ex/Em = 532/553 nm).

Myeloperoxidase (MPO) Colorimetric Activity Assay Kit

K2168

The Myeloperoxidase (MPO) Colorimetric Activity Assay kit offers a reliable and sensitive way for high throughput activity assay of MPO.



Time-dependent recruitment of neutrophils into the lung after intratracheal LPS.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids.

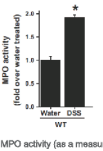
Species reactivity:
Mammalian.

Detection method:
Absorbance (412 nm).

Myeloperoxidase (MPO) Fluorometric Activity Assay Kit

K2169

The Myeloperoxidase (MPO) Fluorometric Activity Assay kit offers a reliable and sensitive way for high throughput activity assay of MPO.



MPO activity (as a measure of neutrophil infiltration) was measured by Myeloperoxidase (MPO) Fluorometric Activity Assay Kit.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids.

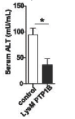
Species reactivity:
Mammalian.

Detection method:
Fluorescence (Ex/Em = 485/525 nm).

Alanine Aminotransferase (ALT or SGPT) Activity Colorimetric/Fluorometric Assay Kit

K2170

The Alanine Aminotransferase (ALT or SGPT) Activity Colorimetric/Fluorometric Assay kit offers a reliable and sensitive way for high throughput activity assay of ALT with a detection limit of 0.05 mU per well.



The serum ALT levels in HF-fed (High-fat diet) LysM PTP1B mice was measured.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids, growth medium, food, etc.

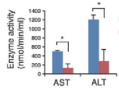
Species reactivity:
Mammalian.

Detection method:
Absorbance (570 nm) or Fluorescence (Ex/Em = 535/587 nm).

Aspartate Aminotransferase (AST or SGOT) Activity Colorimetric Assay Kit

K2171

The Aspartate Aminotransferase (AST or SGOT) Activity Colorimetric Assay Kit offers a reliable and sensitive way for high throughput activity assay of AST with a detection limit of 10 mU per well.



Serum AST levels were determined 4 h after TNF-α–GalN injection.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids.

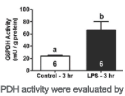
Species reactivity:
Mammalian.

Detection method:
Absorbance (450 nm).

Glucose-6-Phosphate Dehydrogenase Activity Colorimetric Assay Kit

K2172

The Glucose-6-Phosphate Dehydrogenase Activity Colorimetric Assay Kit offers a fast and sensitive method for detecting the G6PDH activity in various samples.



G6PDH activity were evaluated by the Glucose-6-Phosphate Dehydrogenase Activity Colorimetric Assay Kit in the renal cortex.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids.

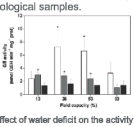
Species reactivity:
Mammalian.

Detection method:
Absorbance (450 nm).

Glutathione Reductase Activity Colorimetric Assay Kit

K2173

The Glutathione Reductase Activity Colorimetric Assay Kit provides an easy and sensitive way of detecting GR activity in biological samples.



Effect of water deficit on the activity of GR in different organs of mahogany seedlings.

Size: 200 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum,erythrocyte lysates, as well as many other biological fluids.

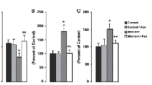
Species reactivity:
Mammalian.

Detection method:
Absorbance (450 nm).

Glutathione Peroxidase Activity Colorimetric Assay Kit

K2174

The Glutathione Peroxidase Activity Colorimetric Assay Kit can be used to detect glutathione dependent peroxidaes in tissue homogenates, plasma and cell lysates.



Altered redox state in preimplantation embryos of Western diet-fed rats.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum,erythrocyte lysates, as well as many other biological fluids.

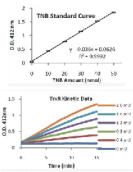
Species reactivity:
Mammalian.

Detection method:
Absorbance (340 nm).

Thioredoxin Reductase Activity Colorimetric Assay Kit

K2175

The Thioredoxin Reductase Assay Kit offers a fast and easy colorimetric assay for measuring thioredoxin reductase activity in different samples.



The TNB Standard Curve is generated by Thioredoxin Reductase Activity Colorimetric Assay Kit.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids.

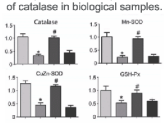
Species reactivity:
Mammalian.

Detection method:
Absorbance (412 nm).

Catalase Activity Colorimetric/Fluorometric Assay Kit

K2177

The Catalase Activity Colorimetric/Fluorometric Assay Kit offers an easy and sensitive way for measuring catalase activity and detects high picounit of catalase in biological samples.



Relative activities of antioxidant enzymes (Catalase, Mn-SOD, CuZn-SOD and GSH-Px) in kidney tissues in various groups.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids, growth medium, food samples.

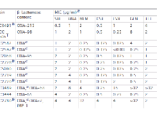
Species reactivity:
Mammalian.

Detection method:
Absorbance (570 nm) or Fluorescence (Ex/Em = 535/587 nm).

Beta-Galactosidase Staining Kit

K2183

The Beta-Galactosidase Staining Kit provides a sensitive and simple assay for detection and quantification of β-Lactamases activity.



Sulbactam activities against recent clinical strains of A. baumannii.

Size: 100 assays.

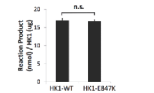
Sample type:
Serum, urine, saliva from mammals infected with β L-secreting bacteria. Food (e.g. milk). Fermentation media and bacterial cultures.

Detection method:
Absorbance (490 nm).

Hexokinase Colorimetric Assay Kit

K2179

The Hexokinase Colorimetric Assay Kit offers an easy and sensitive way for measuring hexokinase activity. The detection limit can be as low as 0.1 mU per well.



Hexokinase activities were measured by the Hexokinase Colorimetric Assay Kit with purified HK1-WT and HK1-E847K proteins.

Size: 100 assays.

Sample type:
Cell and tissue culture lysates, plasma, serum, other biological fluids, cell culture medium.

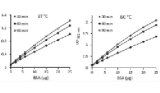
Species reactivity:
Mammalian.

Detection method:
Absorbance (450 nm).

BCA Protein Quantitation Kit

K2185

The BCA Protein Assay Kit offers a fast, convenient and detergent tolerant method for measuring the concentrations of proteins in solution.



Standard curve is generated by the BCA Protein Quantitation Kit.

Size: 100 assays.

Sample type:
Cell and tissue culture homogenates (eukaryotic cells), serum and plasma.

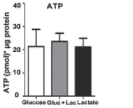
Species reactivity:
Mammalian.

Detection method:
Absorbance (562 nm).

StayBrite Highly Stable ATP Bioluminescence Assay Kit

K2180

The StayBrite Highly Stable ATP Bioluminescence Assay Kit utilizes a highly stable Luciferase (rLucHS) which has enhanced stability and sensitivity with relatively more effective pH range.



ATP quantification by the Hexokinase Colorimetric Assay Kit in neuronal cell cultures grown in glucose, glucose + lactate or in lactate medium.

Size: 100 assays, 1000 assays.

Sample type:
Cell and tissue culture homogenates.

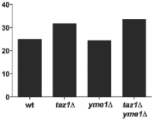
Species reactivity:
Mammalian.

Detection method:
Luminescence.

Protein Carbonyl Content Assay Kit

K2188

The Protein Carbonyl Content Assay Kit offers an easy and accurate procedure for quantifying carbonyls in protein samples.



The protein content in all of the samples was measured by the Protein Carbonyl Content Assay Kit.

Size: 100 assays.

Sample type:
Variable (protein containing samples).

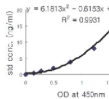
Species reactivity:
Mammalian.

Detection method:
Absorbance (375 and 562 nm).

Adiponectin (human) Elisa Assay Kit

K2192

The Adiponectin (human) Elisa Assay Kit is an enzyme-linked immunosorbent assay for quantitative analysis of Andiponectin.



Standard Curve is generated by Adiponectin (human) Elisa Assay kit.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids.

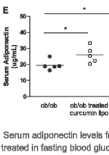
Species reactivity:
Mammalian.

Detection method:
Absorbance (450 nm).

Adiponectin (mouse) Elisa Assay Kit

K2193

The Adiponectin (Mouse) Elisa Assay Kit is an enzyme-linked immunosorbent assay for quantitative analysis of andiponectin in mouse serum, plasma, tissue and cell culture supernatants.



Serum adiponectin levels from mice treated in fasting blood glucose were measured by Adiponectin (mouse) Elisa Assay Kit.

Size: 96 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids.

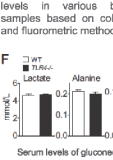
Species reactivity:
Mammalian.

Detection method:
Absorbance (450 nm).

Alanine Colorimetric /Fluorometric Assay Kit

K2205

The Alanine Colorimetric /Fluorometric Assay Kit provides a sensitive, fast and convenient way for detection of alanine levels in various biological samples based on colorimetric and fluorometric method.



Serum levels of gluconeogenic substrates in the fasted state.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids.

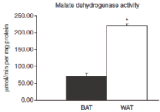
Species reactivity:
Mammalian.

Detection method:
Absorbance (570 nm) or Fluorescence (Ex/Em = 535/587 nm).

Malate Dehydrogenase Activity Colorimetric Assay Kit

K2206

The Malate Dehydrogenase Activity Colorimetric Assay Kit provides a highly sensitive, simple, fast and convenient way for detection of MDH activity in various biological samples based on colorimetric method.



The enzymatic activity of Malate Dehydrogenase in BAT and WAT.

Size: 100 assays.

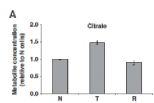
Sample type:
Animal tissues such as liver, heart, muscle, etc. Cell culture: adherent or suspension cells. Mochondria.

Detection method:
Absorbance (450 nm).

Citrate Colorimetric /Fluorometric Assay Kit

K2207

The Citrate Colorimetric /Fluorometric Assay Kit provides a sensitive, simple, fast and convenient way for detection of citrate levels in various biological samples based on colorimetric and fluorometric method.



Relative Citrate concentrations in N, T and R cell lines.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, as well as many other biological fluids.

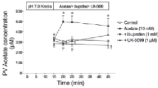
Species reactivity:
Mammalian.

Detection method:
Absorbance (570 nm) or Fluorescence (Ex/Em = 535/587 nm).

Acetate Colorimetric Assay Kit

K2209

The Acetate Colorimetric Assay Kit provides a sensitive, simple and fast way for detection of acetate levels in various samples based on colorimetric method.



Portal Vein (PV) acetate concentration during luminal perfusion of acetate in vivo.

Size: 100 assays.

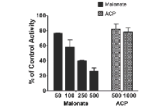
Sample type:
Serum and plasma. Animal tissues: liver, kidney, muscle, heart etc. Cell culture: adherent or suspension cells. Food sample.

Detection method:
Absorbance (450 nm).

Succinate Dehydrogenase Activity Colorimetric Assay Kit

K2210

The Succinate Dehydrogenase Activity Colorimetric Assay Kit provides a sensitive, fast and simple way for detection of SDH activity in various samples based on colorimetric method.



Concentration-dependent effects of malonate and 2-ACP on the succinate dehydrogenase (SDH) activity in bovine heart mitochondrial preparations.

Size: 100 assays.

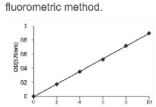
Sample type:
Animal tissues: heart, liver, muscle, etc. Purified mitochondria. Cell culture: adherent or suspension cells.

Detection method:
Absorbance (600 nm).

Ascorbic Acid Colorimetric/Fluorometric Assay Kit

K2211

The Ascorbic Acid Colorimetric /Fluorometric Assay Kit provides a sensitive, fast and convenient way for detection of ascorbic acid levels in various samples based on colorimetric and fluorometric method.



Ascorbic Acid standard curve.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids, food samples, growth medium, etc.

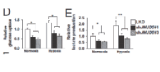
Species reactivity:
Mammalian.

Detection method:
Absorbance (570 nm) or Fluorescence (Ex/Em = 535/587 nm).

Glucose Uptake Fluorometric Assay Kit

K2212

The Glucose Uptake Fluorometric Assay Kit provides a non-radioactive, highly sensitive, fast and convenient way for detection glucose uptake in cell lysates based on fluorometric method.



The fold changes in glucose uptake (D) and lactate production (E) in MCF-7 LKO and shJMJD5 cells were measured.

Size: 100 assays.

Sample type:
Cell lysates.

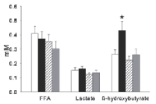
Species reactivity:
Mammalian.

Detection method:
Fluorescence (Ex/Em = 535/587 nm).

D-Lactate Colorimetric Assay Kit

K2213

The D-Lactate Colorimetric Assay Kit provides a simple, fast and convenient way for accurate detection of D-lactate levels in various biological samples based on colorimetric method.



Serum analytes.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids and fermentation media.

Species reactivity:
Mammalian.

Detection method:
Absorbance (450 nm).

Ascorbic Acid Colorimetric Assay Kit II (FRASC)

K2214

The Ascorbic Acid Colorimetric Assay Kit II (FRASC) provides a sensitive, fast and convenient way for detection of ascorbic acid levels in various samples based on colorimetric method.

Mean plasma vitamin C (A) concentrations in the placebo and vitamin groups.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids, growth media and food products.

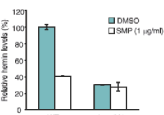
Species reactivity:
Mammalian.

Detection method:
Absorbance (545 - 600 nm).

Heme Colorimetric Assay Kit

K2215

The Heme Colorimetric Assay Kit provides a highly sensitive, fast and convenient way for detection of heme levels in various samples based on colorimetric method.



Sampangine treatment reduces heme levels in wild-type yeast.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids, growth media and food products.

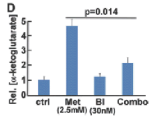
Species reactivity:
Mammalian.

Detection method:
Absorbance (570 nm).

Alpha-Ketoglutarate Colorimetric/Fluorometric Assay Kit

K2216

The Alpha-Ketoglutarate Colorimetric/Fluorometric Assay Kit provides a highly sensitive, fast and convenient way for detection of α-KG levels in various biological samples based on colorimetric and fluorometric method.



Metformin and BI2536 alter glutamine metabolism.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids.

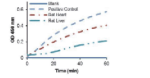
Species reactivity:
Mammalian.

Detection method:
Absorbance (570 nm) or Fluorescence (Ex/Em = 535/587 nm).

Alpha-Ketoglutarate Dehydrogenase Activity Colorimetric Assay Kit

K2217

The Alpha-Ketoglutarate Dehydrogenase Activity Colorimetric Assay Kit provides a sensitive, simple, fast and convenient way for detection α-KGDH activity in various samples based on colorimetric method.



α-Ketoglutarate Dehydrogenase Activity in rat heart and rat liver lysates.

Size: 100 assays.

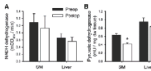
Sample type:
Animal tissues: liver, heart, muscle, etc.
Purified mitochondria.
Cell culture: adherent or suspension cells.

Detection method:
Absorbance (450 nm).

Pyruvate Dehydrogenase (PDH) Activity Colorimetric Assay Kit

K2218

The Pyruvate Dehydrogenase (PDH) Activity Colorimetric Assay Kit provides a sensitive, simple, fast and convenient way for detection PDH activity in various samples based on colorimetric method.



Pyruvate dehydrogenase activity (PDCa) in skeletal muscle (SM) and liver.

Size: 100 assays.

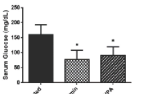
Sample type:
Animal tissues: liver, heart, muscle, etc. Purified mitochondria. Cell culture: adherent or suspension cells.

Detection method:
Absorbance (450 nm).

Glucose Colorimetric Assay Kit II

K2219

The Glucose Colorimetric Assay Kit II provides a sensitive, simple, fast and convenient way for detection of glucose levels in various biological samples based on colorimetric method.



Chronic administration of VPA to ob/ob mice results in decreased serum glucose.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids, fermentation media, food samples, etc.

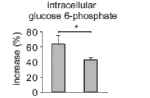
Species reactivity:
Mammalian.

Detection method:
Absorbance (450 nm).

Glucose-6-Phosphate Fluorometric Assay Kit

K2220

The Glucose-6-Phosphate Fluorometric Assay Kit provides a highly sensitive, simple, fast and convenient way for detection of G6P levels in various biological samples based on fluorometric method.



MCT4 knockdown leads to intracellular decreased glycolysis in macrophages.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids, growth medium, etc.

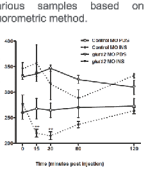
Species reactivity:
Mammalian.

Detection method:
Fluorescence (Ex/Em = 535/587 nm).

Glucose Fluorometric Assay Kit

K2221

The Glucose Fluorometric Assay Kit provides an ultra-sensitive, simple, fast and convenient way for detection of glucose levels in various samples based on fluorometric method.



Knockdown of glut12 leads to hyperglycemia.

Size: 100 assays.

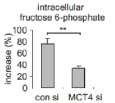
Sample type:
Serum, plasma and other body fluids. Animal tissues: liver, muscle, heart, etc. Cell culture: adherent or suspension cells. Growth media. Food.

Detection method:
Fluorescence (Ex/Em = 535/587 nm).

Fructose-6-Phosphate Fluorometric Assay Kit

K2222

The Fructose-6-Phosphate Fluorometric Assay Kit provides a highly sensitive, simple, fast and convenient way for detection of F6P levels in various samples based on fluorometric method.



MCT4 knockdown leads to intracellular decreased glycolysis in macrophages.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids, growth media and food products.

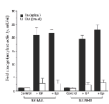
Species reactivity:
Mammalian.

Detection method:
Fluorescence (Ex/Em = 535/587 nm).

Amylase Activity Colorimetric Assay Kit

K2225

The Amylase Activity Colorimetric Assay Kit provides a sensitive, simple, fast and convenient way for detection of α-amylase activity in various samples based on colorimetric method.



Effect of isoproterenol and epinephrine on α-amylase secretion in phmSG Transwell insert cultures.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids, fermentation media, food samples, etc.

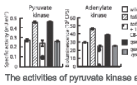
Species reactivity:
Mammalian.

Detection method:
Absorbance (405 nm).

Pyruvate Kinase Activity Colorimetric/Fluorometric Assay Kit

K2223

The Pyruvate Kinase Activity Colorimetric/Fluorometric Assay Kit provides a sensitive, simple, fast and convenient way for accurate detection of PK activity in various samples based on colorimetric and fluorometric method.



The activities of pyruvate kinase and adenylate kinase are higher in the QS mutants than wild-type B. glumae.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids, growth medium, food, etc.

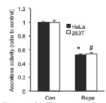
Species reactivity:
Mammalian.

Detection method:
Absorbance (570 nm) or Fluorescence (Ex/Em = 535/587 nm).

Aconitase Activity Colorimetric Assay Kit

K2226

The Aconitase Activity Colorimetric Assay Kit provides a highly sensitive, simple, fast and convenient way for detection of aconitase activity in various samples based on colorimetric method.



Cell treated with rapamycin were analyzed by aconitase activity assay by Aconitase Activity Colorimetric Assay Kit.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids, fermentation media, food samples etc.

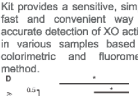
Species reactivity:
Mammalian.

Detection method:
Absorbance (450 nm).

Xanthine Oxidase Activity Colorimetric/Fluorometric Assay Kit

K2224

The Xanthine Oxidase Activity Colorimetric/Fluorometric Assay Kit provides a sensitive, simple, fast and convenient way for accurate detection of XO activity in various samples based on colorimetric and fluorometric method.



Xanthine oxidase activity in ECs from pulmonary arteries.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids, growth medium, food, etc.

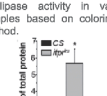
Species reactivity:
Mammalian.

Detection method:
Absorbance (570 nm) or Fluorescence (Ex/Em = 535/587 nm).

Lipase Activity Colorimetric Assay Kit

K2227

The Lipase Activity Colorimetric Assay Kit provides a sensitive, easy and fast way for detection of lipase activity in various samples based on colorimetric method.



Specific lipase activity was measured in lysates from adult midguts.

Size: 100 assays.

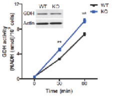
Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids, growth medium, food, etc.

Species reactivity:
Mammalian.

Detection method:
Absorbance (570 nm).

Glutamate Dehydrogenase Activity Colorimetric Assay Kit — K2229

The Glutamate Dehydrogenase Activity Colorimetric Assay Kit provides a sensitive, simple, fast and convenient way for detection of GDH activity in various samples based on colorimetric method.



GDH activity in B cell lymphomas from Eμ-Myc/SIRT4WT and Eμ-Myc/SIRT4KO mice.

Size: 100 assays.

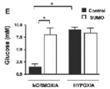
Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids.

Species reactivity:
Mammalian.

Detection method:
Absorbance (450 nm).

Glucose Colorimetric /Fluorometric Assay Kit — K2091

The Glucose Colorimetric /Fluorometric Assay Kit provides a sensitive, simple and convenient way for detection of glucose in various biological samples (serum, plasma, body fluid, growth medium, food, etc.) based on colorimetric and fluorometric method.



Glucose uptake in MEF cells transfected with His-SUMO-1 or pCDNA plasmid control.

Size: 100 assays.

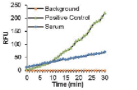
Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids and growth medium.

Species reactivity:
Mammalian.

Detection method:
Absorbance (570 nm) or Fluorescence (Ex/Em = 535/587 nm).

Neuraminidase Activity Fluorometric Assay Kit — K2230

The Neuraminidase Activity Fluorometric Assay Kit provides a sensitive, simple, fast and convenient way for detection of NA activity in various biological samples based on fluorometric method.



NA activityin normal human serum.

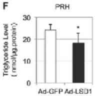
Size: 100 assays.

Sample type:
Animal tissues: liver, brain, kidney, etc. Cell culture: adherent or suspension cells. Serum.

Detection method:
Absorbance (450 nm).

Adipogenesis Colorimetric /Fluorometric Assay Kit — K2120

The Adipogenesis Colorimetric /Fluorometric Assay Kit provides a highly sensitive, fast and convenient way for detection of triglyceride accumulation in cells and tissues based on colorimetric and fluorometric method.



Effects of LSD1 over expression by adenovirus in primary rat hepatocytes on triglyceride levels.

Size: 100 assays.

Sample type:
Adipocyte precursors such as 3T3 cells, human preadipocytes.

Species reactivity:
Mammalian.

Detection method:
Absorbance (570 nm) or Fluorescence (Ex/Em = 535/587 nm).

Multiple Assaies Related

Total Cholesterol and Cholesteryl Ester Colorimetric/Fluorometric Assay Kit — K2090

The Total Cholesterol and Cholesteryl Ester Colorimetric /Fluorometric Assay Kit provides a sensitive, simple and convenient way for detection of free cholesterol, cholesteryl esters, or both in various biological fluids based on colorimetric and fluorometric method.

Table III. *Effect of MCD or cholesterol treatment on cholesterol content and fluidity of DAUDI cell membranes*[a]

Sample	Cholesterol Content (nmol/10^6 cells)	Fluorescence Ratio ([illegible])
Control	3.00 ± 0.35 (100%)	1.90 ± 0.20 (100%)
+ 0.5 mM MCD	2.49 ± 0.25 (83%)	1.71 ± 0.22 (90%)
+ 1 mM MCD	2.22 ± 0.25 (74%)*	1.61 ± 0.20 (85%)
+ 2.5 mM MCD	1.14 ± 0.15 (38%)**	1.19 ± 0.15 (63%)**
+ 5 mM MCD	0.90 ± 0.11 (30%)**	1.05 ± 0.12 (55%)**
+ Cholesterol	8.70 ± 0.80 (290%)**	2.95 ± 0.24 (155%)**

[a] Values in brackets represent percentage of the control, set to 100.
*, Denotes $p < 0.05$ compared with control; ** denotes $p < 0.01$ compared with control ($p > 0.05$ in all other cases).

Size: 100 assays.

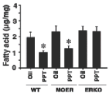
Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids.

Species reactivity:
Mammalian.

Detection method:
Absorbance (570 nm) or Fluorescence (Ex/Em = 535/587 nm).

Free Fatty Acid Quantification Colorimetric /Fluorometric Kit — K2121

The Free Fatty Acid Quantification Colorimetric /Fluorometric Kit provides a sensitive, fast and convenient way for detection of long-chain free fatty acids in various biological samples based on colorimetric and fluorometric method.



PPT inhibits lipid synthesis in the liver.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids.

Species reactivity:
Mammalian.

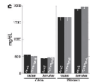
Detection method:
Absorbance (570 nm) or Fluorescence (Ex/Em = 535/587 nm).

Kits

HDL and LDL/VLDL Quantification Colorimetric /Fluorometric Kit

K2122

The HDL and LDL/VLDL Quantification Colorimetric /Fluorometric Kit provides a sensitive, fast and convenient way for detection of HDL and LDL/VLDL in plasma and serum samples based on colorimetric and fluorometric method.



Cholesterol in VLDL/LDL fraction of blood plasma (mg/dL) in Thbs4$_{-/-}$ /ApoE$_{-/-}$ mice with the regular chow or the Western diet.

Size: 100 assays.

Sample type:
Plasma and serum.

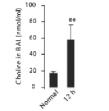
Species reactivity:
Mammalian.

Detection method:
Absorbance (570 nm) or Fluorescence (Ex/Em = 535/587 nm).

Choline/Acetylcholine Quantification Colorimetric /Fluorometric Kit

K2123

The Choline/Acetylcholine Quantification Colorimetric /Fluorometric Kit provides a fast and convenient way for detection of choline and acetylcholine in various biological samples based on colorimetric and fluorometric method.



Changes of choline in the BAL at 12 h after E. coli pneumonia.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids.

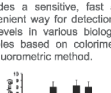
Species reactivity:
Mammalian.

Detection method:
Absorbance (570 nm) or Fluorescence (Ex/Em = 535/587 nm).

Triglyceride Quantification Colorimetric/Fluorometric Kit

K2127

The Triglyceride Quantification Colorimetric/Fluorometric Kit provides a sensitive, fast and convenient way for detection of TG levels in various biological samples based on colorimetric and fluorometric method.



PPT inhibits lipid synthesis in the liver.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids.

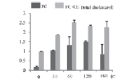
Species reactivity:
Mammalian.

Detection method:
Absorbance (570 nm) or Fluorescence (Ex/Em = 535/587 nm).

Total Cholesterol and Cholesteryl Ester Colorimetric Assay Kit II

K2128

The Total Cholesterol and Cholesteryl Ester Colorimetric Assay Kit II provides a sensitive, simple and convenient way for detection of free cholesterol, cholesteryl esters, or both in various biological fluids based on colorimetric method.



FC and total cholesterol (FC + CE) content at various times after Chol/MBCD loading were measured.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids.

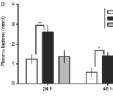
Species reactivity:
Mammalian.

Detection method:
Absorbance (450 nm).

Lactose Colorimetric /Fluorometric Assay Kit

K2129

The Lactose Colorimetric /Fluorometric Assay Kit provides a sensitive, fast and convenient way for detection of lactose levels in various biological samples (plasma, serum, other body fluids, growth media, food, etc.) based on colorimetric and fluorometric method.



Lactose levels were measured by Lactose Colorimetric/Fluorometric Assay Kit.

Size: 100 assays.

Sample type:
Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids.

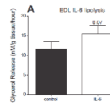
Species reactivity:
Mammalian.

Detection method:
Absorbance (570 nm) or Fluorescence (Ex/Em = 535/587 nm).

Free Glycerol Colorimetric /Fluorometric Assay Kit

K2134

The Free Glycerol Colorimetric /Fluorometric Assay Kit provides a sensitive, fast and convenient way for detection of free glycerol in various samples based on colorimetric and fluorometric method.



Glycerol release was measured by Free Glycerol Colorimetric /Fluorometric Assay Kit.

Size: 100 assays.

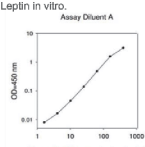
Sample type:
Animal tissues, cells, cell and tissue culture supernatants, plasma and serum, as well as many other biological fluids.

Species reactivity: All.

Detection method:
Absorbance (570 nm) or Fluorescence (Ex/Em = 535/587 nm).

Leptin (human) ELISA Kit — K2191

The Human Leptin ELISA kit is an enzyme-linked immunosorbent assay for quantitative detection of human Leptin in vitro.



Human Leptin concentration (pg/ml)
Standard Curve of Leptin (human) ELISA Kit.

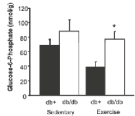
Size: 100 assays.

Species reactivity: Human.

Detection method: Absorbance (450 nm).

Glucose-6-Phosphate Colorimetric Assay Kit — K2208

The Glucose-6-Phosphate Colorimetric Assay Kit provides a sensitive, simple, fast and convenient way for detection of G6P levels in various biological samples based on colorimetric method.



Concentration of glucose 6-phosphate in the heart of db+and db/db mice in sedentary and exercised groups.

Size: 100 assays.

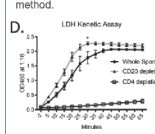
Sample type: Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids.

Species reactivity: Mammalian.

Detection method: Absorbance (450 nm).

Lactate Dehydrogenase (LDH) Activity Assay Kit — K2228

The Lactate Dehydrogenase (LDH) Activity Assay Kit cyides a sensitive, simple, fast and convenient way for detection of LDH activity in various biological samples based on colorimetric method.



Influence of CD20 depletion on Immune Reconstitution Inflammatory Syndrome.

Size: 500 assays.

Sample type: Cell and tissue culture supernatants, urine, plasma and serum, as well as many other biological fluids, etc.

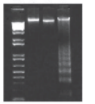
Species reactivity: Mammalian.

Detection method: Absorbance (450 nm).

Sample Extraction related

Apoptotic DNA Ladder Isolation Kit — K2045

The Apoptotic DNA Ladder Isolation Kit is a simple and sensitive way of detecting DNA fragmentation in apoptotic cells.



Genomic DNA from Hela cells was extracted by the Apoptotic DNA Ladder Isolation Kit.

Size: 50 assays.

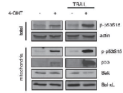
Sample type: Mammalian cell types and tissues undergoing apoptosis.

Species reactivity: Mammalian.

Detection method: Agarose gel electrophoresis (with Ethidium Bromide).

Mitochondria/Cytosol Fractionation Kit — K2103

The Mitochondria/Cytosol Fractionation Kit utilizes a special formulation of reagents to isolate enriched mitochondrial fraction from cytosolic fraction of both apoptotic and nonapoptotic mammalian cells.



Mitochondria-enriched fractions and light membrane/cytosolic fractions were isolated by Mitochondria/Cytosol Fractionation Kit.

Size: 25 assays, 100 assays.

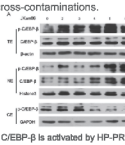
Sample type: Cells and tissues.

Species reactivity: Mammalian.

Detection method: Western blotting, ELISA or other assays.

Nuclear/Cytosol Fractionation Kit — K2111

The Nuclear/Cytosol Extraction Kit offers a fast and convenient separation of nuclear extract from the cytoplasmic fraction of mammalian cells with little or no cross-contamination.



C/EBP-β is activated by HP-PRRSV (porcine reproductive and respiratory syndrome virus) infection.

Size: 25 assays, 100 assays.

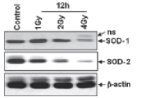
Sample type: Cell culture (adherent and suspension), fresh and frozen tissues.

Species reactivity: Mammalian.

Mammalian Cell Extraction Kit

K2114

The Mammalian Cell Extraction Kit offers an optimized cell extraction buffer, protease inhibitor cocktail and DTT for rapid and easy extraction of mammalian proteins from cultured cells and tissue samples without denaturation.



Heat shock proteins were extracted from samples by the Mammalian Cell Extraction Kit.

Size: 500 assays.

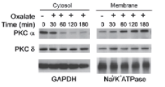
Sample type:
Cell culture (adherent and suspension), fresh and frozen tissues.

Species reactivity:
Mammalian.

FractionPREP™ Cell Fractionation Kit

K2115

The FractionPREP™ Cell Fractionation system is a fast and simple way of extracting four subcellular protein factions (cytosol, nucleus, membrane/particulate, and cytoskeletal fractions) from a single mammalian sample.



Effect of oxalate on translocation of PKC-α and-δ.

Size: 50 assays.

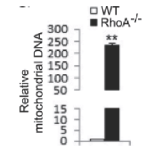
Sample type:
Cell culture (adherent and suspension), fresh and frozen tissues.

Species reactivity:
Mammalian.

Mitochondrial DNA Isolation Kit

K2117

The Mitochondrial DNA Isolation Kit offers a simple and effective tool for isolating mtDNA from various cells and tissues with high without genomic DNA contaminations.



Mitochondrial DNA contents in total thymocytes.

Size: 50 assays.

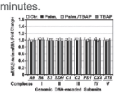
Sample type:
Cell culture (adherent and suspension), fresh and frozen tissues.

Species reactivity:
Mammalian.

Genomic DNA Isolation Kit

K2118

The Genomic DNA Isolation Kit offers an easy and convenient way for fast extraction of genomic DNA from mammalian cells and tissue samples in high yield and purity and takes less 90 minutes.



Palmitic acid decrease gene expression of (OXPHOS oxidative phosphorylation system) subunits.

Size: 50 assays.

Sample type:
Cell culture (adherent and suspension), fresh and frozen tissues.

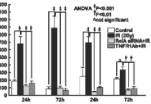
Species reactivity:
Mammalian.

Others

Luciferase Reporter Assay Kit

K2181

The Luciferase Reporter Assay Kit offers a fast and easy way of sensitive way of detecting lucifeasue activity in transfected eukaryotic cells.



Luciferase reporter assay was measured by the Luciferase Reporter Assay Kit.

Size: 200 assays.

Sample type:
Cell and tissue culture homogenates (eukaryotic cells).

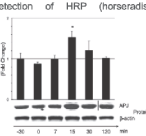
Species reactivity:
Mammalian.

Detection method:
Luminescence.

ECL Western Blotting Substrate Kit

K2187

The ECL Western Blotting Substrate is a sensitive, nonradioactive, and upgraded luminol-based chemiluminescent substrate for easy detection of HRP (horseradish



Expression of APJ (apelin receptor) before and after ischemia.

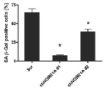
Size: 50 assays, 500 assays.

Detection method: Be repeatedly exposed to X-ray film or a CCD camera to obtain optimal results or stripped of the immuno-detection reagents and re-probed.

Beta-Galactosidase Staining Kit

K2182

The Beta-galactosidase Staining Kit utilizes X-gal as substrate and can be easily assayed in situ.



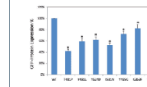
NORE1A is essential for senescence in human bronchial epithelial cells.

Size: 250 assays.

GFP Quantitation Kit

K2186

The GFP Quantitation Kit quantifies GFP in a 96 micro-plate form. Cells and tissues can be directly homogenized in the GFP Assay Buffer.



Quantification of GFP-DNMT1 proteins in HEK293 cells.

Size: 100 assays.

Sample type:
Cell and tissue culture.

Species reactivity:
Mammalian.

Detection method:
Fluorescence (Ex/Em = 488/507 nm).

PCR Quick Screening Kit

K2189

The PCR Quick Screening Kit provides quick screening of clone candidates by PCR technology. The methods can screen colonies directly from the plate without culture growing.

Size: 500 samples.

PEG Virus Precipitation Kit

K2190

The PEG Virus Precipitation Kit offers a fast and convenient way for concentrating virus without ultra-centrifugation.

Size: 50 preparations, 200 preparations.

EZLink Sulfo-NHS-LC -Biotin Kit

K1001

The EZLink Sulfo-NHS-LC-Biotin Kit contains reagents sufficient for 10 biotin labeling reactions. It is a water-soluble biotin reagent for labeling protein, antibody or other molecules with amidogen (NH2-).

Size: 10 reactions.

EZLink NHS-Biotin Kit

K1002

The EZLink NHS-Biotin Kit contains reagents sufficient for 10 biotin labeling reactions. It is a water-soluble biotin reagent for labeling protein, antibody or other molecules with amidogen (NH2-).

Size: 10 reactions.

EZLink NHS-LC-Biotin Kit

K1003

The EZLink NHS-LC-Biotin Kit contains reagents sufficient for 10 biotin labeling reactions. It is a water-soluble biotin reagent for labeling protein, antibody or other molecules with amidogen (NH2-).

Size: 10 reactions.

EZLink NHS-SS-Biotin Kit

K1004

The EZLink NHS-SS-Biotin Kit contains reagents sufficient for 10 biotin labeling reactions. It is a water-soluble biotin reagent for labeling protein, antibody or other molecules with amidogen (NH2-).

Size: 10 reactions.

EZLink Sulfo-NHS-Biotin Kit

K1005

The EZLink Sulfo-NHS-Biotin Kit contains reagents sufficient for 10 biotin labeling reactions. It is a water-soluble biotin reagent for labeling protein, antibody or other molecules with amidogen (NH2-).

Size: 10 reactions.

EZLink Sulfo-NHS-SS-Biotin Kit

K1006

The EZLink Sulfo-NHS-SS-Biotin Kit contains reagents sufficient for 10 biotin labeling reactions. It is a water-soluble biotin reagent for labeling protein, antibody or other molecules with amidogen (NH2-).

Size: 10 reactions.

Protein

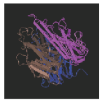
TNF related

TNF-alpha, human recombinant protein

P1001

TNF-α is a potent cytokine expressed as a 26 kDa transmembrane protein.

Herpes Simplex Virus 1 Protein Kinase US3 (HSV-1 US3) inhibits TNF-α-induced NF-κB activation.



Size: 10 µg, 50 µg, 1 mg.

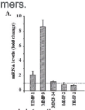
Soluble in water: 0.1 - 1.0 mg/ml.

ED50: < 0.05 ng/ml.

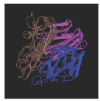
TNF-alpha, murine recombinant protein

P1002

TNF-α is a potent cytokine expressed as a transmembrane protein with 235 amino acids that is cleaved to the soluble monomer by TNF-α converting enzyme (TACE) and forms stable homotrimers.



TNF-α modulates the expression of MMPs and TIMPs in skeletal muscle cells.



Size: 10 µg, 50 µg, 1 mg.

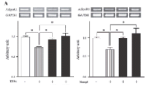
Soluble in water: 0.1 - 1.0 mg/ml.

ED50: < 0.1 ng/ml.

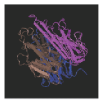
TNF-alpha, rat recombinant protein

P1003

Rat TNF-α is a potent cytokine expressed as a transmembrane protein with 235 amino acids that is cleaved to the soluble monomer by TACE and forms stable homotrimers.



Expression of AdipoR1 in cultured cardiomyocytes.



Size: 10 µg, 50 µg, 1 mg.

Soluble in water: 0.1 - 1.0 mg/ml.

ED50: < 0.05 ng/ml.

IFN-gamma, murine recombinant protein

P1015

Mature mouse IFN-γ exists as a noncovalently linked homodimer of 20 - 25 kDa variably glycosylated subunits. The recombinant murine IFN-γ is a 15.6 kDa protein containing 134 amino acid residues.

IFN-γ is a prototype proinflammatory cytokine that is mainly produced by activated T, B and NK cells.

Size: 20 µg, 100 µg, 1 mg.

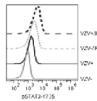
Soluble in water: 0.1 - 1.0 mg/ml.

ED50: < 0.05 ng/ml.

IFN-alpha 1, human recombinant protein

P1058

IFN-α1, also called IFN-α, is a lymphoid factor with potent antiviral antiproliferative and immunomodulatory properties. Human IFN-α1 is a 19.3 kDa protein containing 166 amino acid residues.



The ability of exogenous IFN-α to trigger STAT3 phosphorylation in infected cells is unimpaired.

Size: 10 µg, 100 µg, 1 mg.

Soluble in water: 0.1 - 1.0 mg/ml.

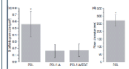
ED50: < 0.1 ng/µg.

EGF related

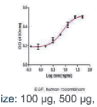
EGF human recombinant protein

P1008

The recombinant human EGF is a 6.2 kDa protein containing 53 amino acid residues. The recombinant human EGF has an N-terminal His-tag preceding the 53 amino acid sequence (MW: 8.5 kDa).



Morphology and internal structure of nanofibrous scaffolds.



Size: 100 µg, 500 µg, 1 mg, 5 mg.

Soluble in water: 0.1 - 1.0 mg/ml.

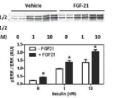
ED50: 5.92 - 10.06 ng/ml.

FGF related

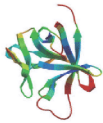
FGF-21, murine recombinant protein

P1009

The recombinant mouse FGF-21 produced in E.Coli is a single and non-glycosylated polypeptide chain containing 183 amino acids including N-terminal Methionine.



FGF-21 pre-incubation increases basal ERK1/2 phosphorylation compared to vehicle.



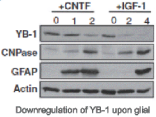
Size: 10 µg, 50 µg, 1 mg.

Soluble in water: 0.1 - 1.0 mg/ml.

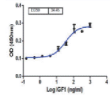
IGF-1, human recombinant

P1016

Human IGF-1 is a 7.6 kDa protein containing 70 amino acid residues. The recombinant human IGF-1 is produced using animal origin free technology.



Downregulation of YB-1 upon glial differentiation.



Size: 100 µg, 1 mg, 5 mg, 10 mg, 20 mg, 50 mg, 1 g.

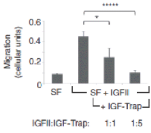
Soluble in water: 0.1 - 1.0 mg/ml.

EC50: 21.6 - 54.7 ng/ml.

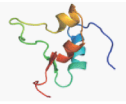
IGF-II, human recombinant protein

P1017

The recombinant Human IGF-II is a 7.5 kDa protein containing 67 amino acid residues.



The IGF-Trap inhibits IGFIR signaling and blocks IGFI- and IGFII-induced cellular activities in vitro.



Size: 10 µg, 50 µg, 1 mg.

Soluble in water: 0.1 - 1.0 mg/ml.

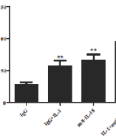
EC50: < 1.0 ng/ml.

Immuno-modulator related

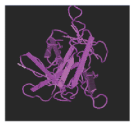
IL-1beta, human recombinant protein

P1018

The recombinant human IL-1β is a 17.0 kDa protein containing 153 amino acid residues.



Neutralization of IL-18 restores endothelial differentiation.



Size: 10 µg, 50 µg, 1 mg.

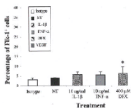
Soluble in water: 0.1 - 1.0 mg/ml.

ED50: < 0.1 ng/ml.

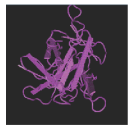
IL-1 beta, rat recombinant protein

P1019

The rat IL-1β cDNA encodes a 268 amino acids precursor. The recombinant rat IL-1β is a 17.3 kDa protein containing 153 amino acid residues.



Expression of Flk-1 in macrophage cell lines.



Size: 10 µg, 50 µg, 1 mg.

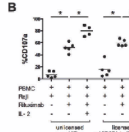
Soluble in water: 0.1 - 1.0 mg/ml.

ED50: < 0.1 ng/ml.

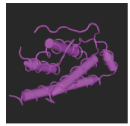
IL-2, human recombinant protein

P1020

Human IL-2 acts on murine and human T cells. The recombinant human IL-2 is a 15.5 kDa protein containing 134 amino acid residues.



Rituximab alone is sufficient to activate unlicensed natural killer (NK) cells.



Size: 10 µg, 50 µg, 1 mg.

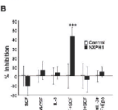
Soluble in water: 0.1 - 1.0 mg/ml.

ED50: < 0.1 ng/ml.

IL-3, human recombinant protein

P1021

IL-3 is highly species-specific and human IL-3 does not show activity on murine cells. The recombinant human IL-3 is a 15.0 kDa protein containing 133 amino acid residues.



Expression and function of NXPH in huCB.

Size: 10 µg, 50 µg, 1 mg.

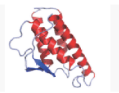
Soluble in water: 0.1 - 1.0 mg/ml.

ED50: < 0.1 ng/ml.

IL-4, murine recombinant protein

P1022

Mature mouse IL-4 shares 39%, 39%, and 59% amino acid sequence identity with bovine, human, and rat IL-4, respectively. Human, mouse, and rat IL-4 are species-specific. The recombinant murine IL-4 is a 13.5 kDa globular protein containing 120 amino acid residues.



Soluble in water: 0.1 - 1.0 mg/ml.

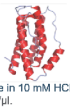
Size: 10 µg, 50 µg, 1 mg.

ED50: < 2.0 ng/ml.

IL-6, rat recombinant protein

P1023

The rat IL-6 cDNA encodes a 211 amino acid protein with a 24 amino acids signal sequence. The recombinant rat IL-6 is a 21.7 kDa protein containing 187 amino acid residues.



Soluble in 10 mM HCl: 0.1 - 1.0 µg/µl.

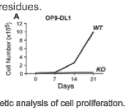
Size: 10 µg, 50 µg, 1 mg.

ED50: < 0.01 ng/ml.

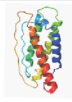
IL-7, human recombinant protein

P1024

Human and murine IL-7 is cross-species reactive. The recombinant human IL-7 is a 17.4 kDa protein containing 153 amino acid residues.



Kinetic analysis of cell proliferation.



Size: 10 µg, 50 µg, 1 mg

.

Soluble in water: 0.1 mg/ml.

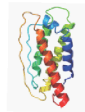
ED50: < 0.5 ng/ml.

IL-7, murine recombinant protein

P1025

Human and murine IL-7 is cross-species reactive. The recombinant murine IL-7 is a 15.0 kDa protein containing 130 amino acid residues.

Ikaros null thymic progenitors requires interaction with Notch ligand to differentiate and proliferate.



Size: 10 µg, 50 µg, 1 mg.

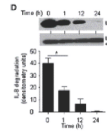
Soluble in water: 0.1 - 1.0 µg/µl.

ED50: < 0.2 ng/ml.

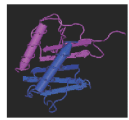
IL-8, human recombinant protein

P1026

The human IL-8 cDNA encodes a 99 amino acid protein with a 20 amino acid signal sequence. The recombinant human IL-8 (endothelial-derived) is a 8.9 kDa protein containing 77 amino acid residues.



Hypertonic saline (HTS) decreases IL-8 levels of cystic fibrosis (CF) bronchoalveolar lavage fluid (BALF) in vitro.



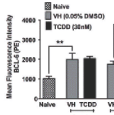
Size: 25 µg, 1 mg.

Soluble in water: 0.1 - 1.0 µg/µl.

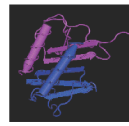
IL-10, human recombinant protein

P1028

Human IL-10 is active on murine cells, but murine IL-10 is inactive on human cells. The recombinant human IL-10 is a 18.6 kDa protein containing 161 amino acid residues.



Increase in BCL-6 protein levels upon TCDD treatment in human primary B cells.



Size: 10 µg, 50 µg, 1 mg.

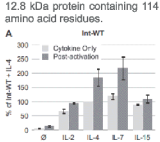
Soluble in water: 0.1 - 1.0 µg/µl.

ED50: < 2 ng/ml.

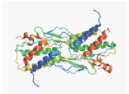
IL-15, human recombinant protein

P1029

Both human and simian IL-15 are active on mouse cells. The recombinant human IL-15 is a 12.8 kDa protein containing 114 amino acid residues.



Unintegrated HIV-1 generates de novo virus in resting CD4+ T cells.



Size: 10 µg, 50 µg, 1 mg.

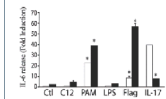
Soluble in water: 0.1 - 1.0 µg/µl.

ED50: < 0.5 ng/ml.

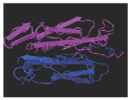
IL-17A, human recombinant protein

P1030

IL-17A exhibits cross-species bioactivity between human and murine cells. The recombinant IL-17 is a 31 kDa disulfide-linked homodier of two 136 amino acid polypeptide chains.



IL-6 hypersecretion occurs in response to pattern recognition receptor activation.



Size: 25 µg, 1 mg.

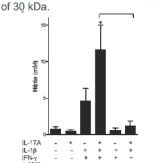
Soluble in water: 0.1 - 1.0 µg/µl.

ED50: < 2 ng/ml.

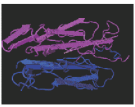
IL-17A, rat recombinant protein

P1031

Human, mouse and rat IL-17A show activity on mouse cells. The recombinant rat IL-17A is a homodimeric, non-glycosylated polypeptide containing 268 amino acids and has a molecular weight of 30 kDa.



Mechanisms through which IL-17 promotes cytokine-induced β-cell apoptosis.



Size: 25 µg, 1 mg.

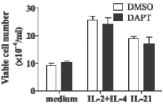
Soluble in water: 0.1 - 1.0 µg/µl.

ED50: 30 ng/ml.

IL-21, human recombinant protein

P1033

The recombinant human IL-21 is a homodimeric, non-glycosylated polypeptide containing 133 amino acid residues and has a molecular weight of 15.5 kDa.



DAPT effect on GC-B cells is specific to Notch signaling.

Size: 10 µg, 50 µg, 1 mg.

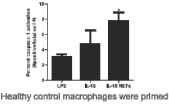
Soluble in water: 0.1 - 1.0 µg/µl.

ED50: < 5 ng/ml.

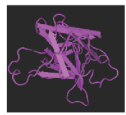
IL-18, human recombinant protein

P1032

The human IL-18 cDNA encodes a 193 aa protein with a 36 amino acid propeptide. The recombinant human IL-18 is an 18 kDa single and non-glycosylated polypeptide chain containing 157 amino acids.



Healthy control macrophages were primed with LPS and treated with IL-18 or NETs.



Size: 25 µg, 100 µg, 1 mg.

Soluble in ice-cold water: 0.5 - 1 µg/µl.

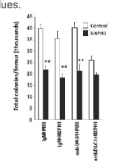
ED50: 5 ng/ml.

SCF Related

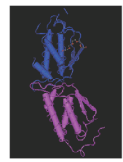
SCF, human recombinant protein

P1036

Human SCF shows low activity on murine cells, while murine and rat SCF are fully active on human cells. The recombinant human SCF is a 18.4 kDa protein containing 165 amino acid residues.



Effect of in vitro exposure to recombinant NXPH1 on muBM.



Size: 10 µg, 50 µg, 1 mg.

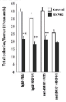
Soluble in water: 0.1 - 1.0 µg/µl.

ED50: < 2 ng/ml.

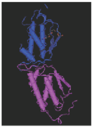
SCF, murine recombinant protein

P1037

Human SCF shows low activity on murine cells, while murine and rat SCF are fully active on human cells. The recombinant murine SCF is an 18.3 kDa protein containing 164 amino acid residues.



Effect of in vitro exposure to recombinant NXPH1 on muBM.



Size: 10 µg, 50 µg, 1 mg.

Soluble in sterile water: 0.1 - 1.0 µg/µl.

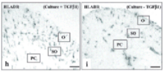
ED50: < 10 ng/ml.

TGF Related

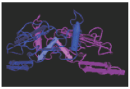
TGF-β1, human recombinant (CHO cells) protein

P1039

The recombinant human TGF-β1 is a 25.0 kDa protein containing two identical 112 amino acid polypeptide chains linked by a single disulfide bond.



Immunohistochemical localization and characterization of immune cells in the human pulp.



Size: 5 µg, 50 µg, 500 µg.

Soluble in water: 50 µg/ml.

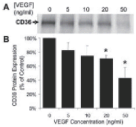
ED50: < 0.05 ng/ml.

VEGFs Related

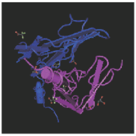
VEGF165, human recombinant protein

P1041

VEGF165 is the most abundant and potent isoform. The recombinant human VEGF is a 38.2 kDa homodimeric protein consisting of two 165 amino acid polypeptide chains.



Endothelial CD36 expression is regulated by VEGF and shear stress.



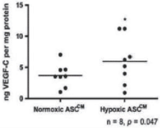
Size: 10 µg, 50 µg, 1 mg.

Soluble in water: 0.1 - 1.0 mg/ml.

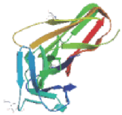
VEGF-C, human recombinant protein

P1059

VEGF-C is a 125 amino acid protein that lacks the N-terminal signal peptide. Human VEGF-C has about 85% homology with murine VEGF-C.



Hypoxia increased VEGF-C from ASCs.



Size: 10 µg, 50 µg, 1 mg.

Soluble in 0.1% acetic acid: 0.1 - 1.0 mg/ml.

ED50: N/A.

BAFF Related

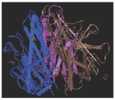
BAFF, human recombinant protein

P1044

The recombinant human BAFF is a soluble protein containing 153 amino acid residues with a N-terminal His-tag (MW: 19.335 kDa).

Table 3. BAFF and APRIL protect B-CLL cells from spontaneous apoptosis

	Patients									
	[illegible]	8p	13c	15c	[illegible]	19	21	22	23	Mean
Control	1	1	1	1	1	1	1	1	1	1
BAFF	[illegible]	0.69	[illegible]	[illegible]	[illegible]	0.2	0.79	0.6	0.43	0.55*
APRIL	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	0.09	0.98	0.78	0.19	0.57*
BAFF + APRIL	ND	0.61	ND	ND	0.71	ND	0.6	ND	ND	0.62†



Size: 20 µg, 100 µg, 500 µg, 1 mg.

Soluble in water: 0.1 - 1.0 mg/ml.

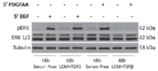
ED50: < 10 ng/ml.

PDGFs Related

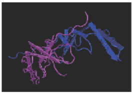
PDGF-AA, murine recombinant protein

P1046

The recombinant mouse PDGF-AA is a disulfide linked non-glycosylated homodimer comprised of 2 polypeptide chains of 126 amino acids, each with a dimeric molecular weight of 28.9 kDa.



Cilium-related signaling is altered in myofibroblasts.



Size: 10 µg, 1 mg.

Soluble in water: 0.1 - 0.5 mg/ml.

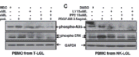
ED50: N/A.

Protein

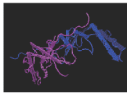
PDGF-BB, human recombinant protein

P1047

The recombinant human PDGF-BB is a 24.3 kDa B chain homodimer protein formed by subunits of 109 amino acid residues.



PDGF-BB mediates downstream target Akt and ERK pathways activation.



Size: 10 μg, 50 μg, 1 mg.

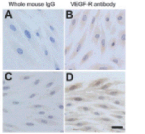
Soluble in water: 0.1 - 1.0 mg/ml.

ED50: < 1 ng/ml.

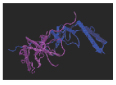
PDGF-BB, murine recombinant protein

P1048

The recombinant murine PDGF-BB is a homodimeric and non-glycosylated polypeptide of 109 amino acids and having a molecular mass of 24.4 kDa.



VEGFR distribution in MS1 and MS1-VEGF cells.



Size: 10 μg, 50 μg, 1 mg.

Soluble in sterile 100mM acetic acid and 0.1% BSA: 0.1 - 1.0 mg/ml.

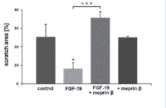
ED50: < 2 ng/ml.

FGF Related

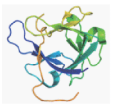
FGF-19, human recombinant protein

P1050

The recombinant human FGF-19 is a 21.8 kDa protein containing 195 amino acid residues.



FGF-19 is cleaved by meprin β, thereby altering its biological activity on keratinocyte proliferation/migration.



Size: 25 μg, 100 μg, 1 mg.

Soluble in water: 0.1 - 1.0 mg/ml.

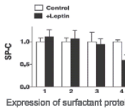
ED50: 50 - 200 ng/ml.

Leptin Related

Leptin Receptor, human recombinant protein

P1063

Lepr gene polymorphism is related to the levels of blood glucose, insulin, leptin and triglyceride. Deficiency of Lepr gene can directly lead to obesity.



Expression of surfactant protein genes SP-C.

Size: 10 μg, 50 μg, 1 mg.

Soluble in water and most aqueous buffers, below and above the isoelectric point.

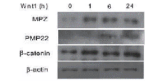
ED50: N/A.

Wnt Related

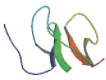
WNT-1, human recombinant protein

P1068

WNT-1 is a 38.4 kDa and non-glycosylated protein containing 343 amino acid residues. Elevated levels of Wnt proteins are associated with tumorigenesis and present in numerous human breast cancers.



MSC80 cells treated with recombinant Wnt1 leads increase in MPZ, PMP22 and β-catenin proteins.



Size: 10 μg, 50 μg, 1 mg.

Soluble in water: 0.1 - 1.0 μg/μl.

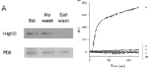
ED50: 1.5 - 2.5 ng/ml.

HSP Related

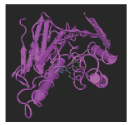
Heat Shock Protein 90 (HSP90), human recombinant protein

P1070

HSP90 assists other proteins to fold properly, stabilizes proteins against heat stress, and aids in protein degradation. HSP90 also stabilizes a lot of proteins required for tumor growth.



ATP hydrolysis by Hsp90 is required for CTA1 translocation from the ER.



Size: 25 μg, 100 μg, 1 mg.

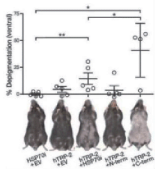
Soluble: N/A.

ED50: N/A.

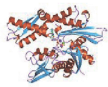
Heat Shock Protein 70, human recombinant protein

P1071

The HSP70s are important to protein folding. The HSP70s help to protect cells from thermal or oxidative stress. HSP70s directly inhibits apoptosis.



A peptide within the C terminus of HSP70I is required for inducing depigmentation.



Size: 25 µg, 100 µg, 1 mg.

Soluble in water: > 40 mg/ml.

Protein Related

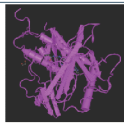
VEGFR2, human recombinant protein

P1080

The recombinant human VEGFR2 is produced in baculovirus as a monomeric and glycosylated polypeptide which has a total molecular mass of 116 kDa.

Size: 10 µg, 100 µg.

Soluble in sterile water: < 0.1 mg/ml.

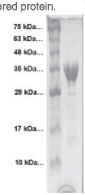


ED50: 10.0 ng/ml.

Protein A (Liquid form)

P1088

Protein A is a 42 kDa surface protein that can bind to immunoglobulins. Recombinant Protein A is a genetically engineered protein.



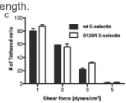
SDS-PAGE (12%) of Recombinant Protein A.

Size: 10 mg, 25 mg, 100 mg, 1 g.

Protein A Sepharose

P1089

Protein A Sepharose beads display high chemical and physical stability as well as high flow rate, hydrophilicity and gel strength.



Cell-based flow binding assay with HL60 cells at physiological shear stress.

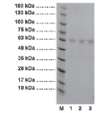
Size:
1 ml, 5 ml, 25 ml, 100 ml.

Protein A/G

P1090

The recombinant fusion protein A/G contains 6× His-tag on the N-terminus, five Ig-binding regions of protein A fusion with three Ig-binding region of protein G.

QDs, PECAM and VCAM enable fluorescence visualization of target proteins.



Size: 1 mg, 5 mg, 25 mg, 100 mg, 1 g.

Soluble in water: 5 mg/ml.

Protein A/G Sepharose

P1091

Protein A/G Sepharose is prepared by covalently coupling recombinant Protein A/G to 6% cross-linked sepharose beads.

Size: 1 ml, 5 ml, 25 ml, 100 ml.

Protein G Sepharose

P1092

Protein G-Sepharose beads are prepared by covalently coupling recombinant Protein G to 6% cross-linked sepharose beads.

Size: 1 ml, 5 ml, 25 ml, 100 ml.

Protein A-Agarose

P1094

Protein A-Agarose beads are prepared by covalently coupling recombinant Protein A to 6% cross-linked agarose beads, the most popular resin for protein affinity purification methods. Protein A is a 42 kDa surface protein that can bind immunoglobulins.

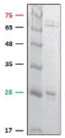
Size: 1 ml, 5 ml, 25 ml, 100 ml.

Enzyme

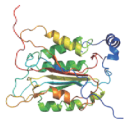
Caspase Related

Caspase-1, human recombinant proteinase — E1001

Caspase-1 is a prototypical member of the caspase-family of cysteine proteases. Caspase-1 exists in cells as an inactive 45 kDa proenzyme, and is routinely tested for its ability to enzymatically cleave Ac-YVAD-pNA or Ac-YVAD-AFC.



Quality Control.

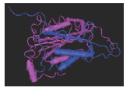


Size: 25 units, 100 units.

Soluble in PBS containing 15% glycerol.

Caspase-2, human recombinant proteinase — E1002

Caspase-2 belongs to the caspase-family of cysteine proteases. The recombinant active human Caspase-2 was expressed in E. coli. The active Caspase-2 preferen-tially cleaves Caspase-2 substrates (VDVAD-AFC or VDVAD-pNA).

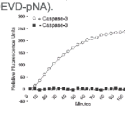


Size: 25 units, 100 units.

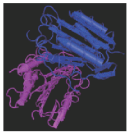
Soluble in PBS containing 15% glycerol.

Caspase-3, human recombinant proteinase — E1003

Caspase-3 is a major member of the caspase-family of cysteine proteases. The active Caspase-3 preferentially cleaves Caspase-3 substrates (DEVD-AFC or DEVD-pNA).



Kinetic plot of DEVD-NucView488 cleavage by Caspase-3.

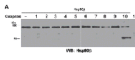


Size: 25 units, 100 units, 5 µg, 10 µg.

Soluble in PBS containing 15% glycerol.

Caspase-4, human recombinant proteinase — E1004

Caspase-4 belongs to the caspase-family of cysteine proteases. The recombinant active human Caspase-4 was expressed in E. coli. The function of Caspase-4 is an inflammatory Caspase. It has a role in the immune system together with Caspase-1 and Caspase-5.



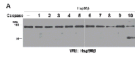
Caspase-cleavage assay was conducted by mixing purified His-HSP90β protein with purified active Caspase-1 to -10.

Size: 25 units, 100 units.

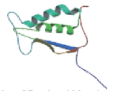
Soluble in PBS containing 15% glycerol.

Caspase-5, human recombinant proteinase — E1005

Caspase-5 is a member of cysteine-aspartic acid protease that has a role in the immune system together with Caspase-1 and Caspase-4.



Caspase-cleavage assay was conducted by mixing purified His-HSP90β protein with purified active Caspase-1 to -10.

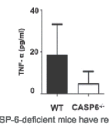


Size: 25 units, 100 units.

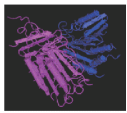
Soluble in PBS containing 15% glycerol.

Caspase-6, human recombinant proteinase — E1006

Caspase-6 belongs to the caspase-family of cysteine proteases. The active Caspase-6 involves in the proteolysis of poly ADP-ribose polymerase. Caspase -6 can function as a downstream enzyme and is processed by Caspases- 7, -8 and -10.



CASP-6-deficient mice have reduced pulmonary TNF-α production after sepsis.



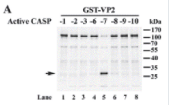
Size: 25 units, 100 units.

Soluble in PBS containing 15% glycerol.

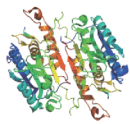
Caspase-7, human recombinant proteinase

E1007

Caspase-7 belongs to the caspase-family of cysteine proteases. The active Caspase-7 involves in the proteolysis of PARP.



CASP-7 cleaves VP2 at the site of 417DLLD2G421 in vitro.



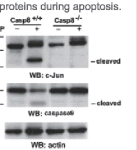
Size: 25 units, 100 units.

Soluble in PBS containing 15% glycerol.

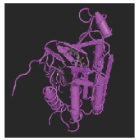
Caspase-8, human recombinant proteinase

E1008

Caspase-8 belongs to the caspase-family of cysteine proteases. The active Caspase-8 can activate Caspase-3 leading to degradation of various cellular target proteins during apoptosis.



FAS ligand-dependent caspase activation plays a role in CDDP-induced c-Jun cleavage.



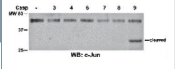
Size: 25 units, 100 units.

Soluble in PBS containing 15% glycerol.

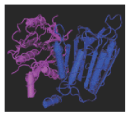
Caspase-9, human recombinant proteinase

E1009

Caspase-9 belongs to the caspase-family of cysteine proteases. The aspartic acid specific protease Caspase-9 has been connected to the mitochondrial death pathway. The recombinant active human Caspase-9 was expressed in E. coli.



Caspase cleavage reaction was performed by mixing purified recombinant c-Jun with purified recombinant Caspase-3, -4, -6, -7, -8 and -9.



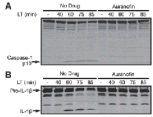
Size: 25 units, 100 units.

Soluble in PBS containing 15% glycerol.

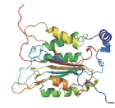
Caspase-1, mouse recombinant proteinase

E1010

Caspase-1 has been revealed to induce cell necrosis or pyroptosis. The recombinant active mouse Caspase-1 was expressed in E. coli.



Auranofin prevented LT-mediated inflammasome activation by targeting events downstream of MEK cleavage.



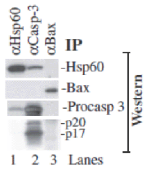
Size: 25 units, 100 units.

Soluble in PBS containing 15% glycerol.

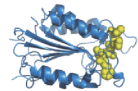
Caspase-3 Proform, mouse recombinant proteinase

E1011

Cascades of caspase activation have been shown to be crucial signal-transducing events in apoptosis. The recombinant Procaspase-3 was expression in E. coli.



HSP60 interacts with Procaspase-3 but not Bax in BMD188-treated cells.



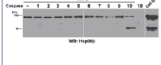
Size: 5 µg.

Soluble in PBS containing 15% glycerol.

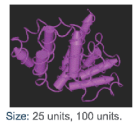
Caspase-10/a, human recombinant proteinase

E1012

Sequential activation of caspase plays a crucial role in the execution-phase of cell apoptosis. The recombinant active human Caspase-10/a was produced in E. coli.



Caspase-10 cleaves HSP90β in vitro.



Size: 25 units, 100 units.

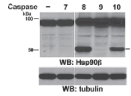
Soluble in PBS containing 15% glycerol.

Enzyme

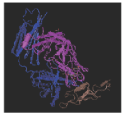
Caspase-10/b, human recombinant proteinase

E1013

Sequential activation of caspase plays a crucial role in the execution-phase of cell apoptosis. The recombinant active human Caspase-10/b was produced in E. coli.



Both Caspase-10 and -8 are required for UVB-induced HSP90β cleavage in vivo.



Size: 25 units, 100 units.

Soluble in PBS containing 15% glycerol.

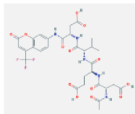
Peptide

Caspase Related

Caspase-3 Substrate DEVD-AFC — G1001

Ready-to-use fluorometric substrate for Caspase-3 (Km: 9.7 μM) recognizes the amino acid sequence DEVD. Caspase-3 and related caspase activity can be quantified by fluorescent detection of free AFC.

Desacyl ghrelin (DAG) prevents doxorubicin (DOX)-induced myocardial fibrosis and apoptosis.

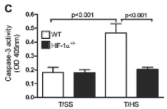


Size: 200 assays, 1000 assays.

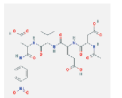
Formulation:In DMSO (1 mM).

Caspase-3 Substrate DEVD-pNA — G1002

Caspase-3 Substrate DEVD-pNA is a cost-effective alternative way for carrying out large quantities of caspase assays.



HIF-1 promotes apoptosis during gut ischemia- reperfusion (I/R) injury.

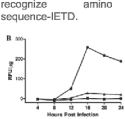


Size: 200 assays, 1000 assays.

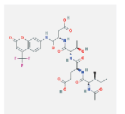
Formulation: In DMSO (4 mM).

Caspase-8 Substrate IETD-AFC — G1003

Caspase-8 Substrate IETD-AFC is a ready-to-use fluorometirc substrate for FLICE/Caspase-8 and its related caspases which recognize amino acid sequence-IETD.



Fluorometric analysis of Caspase-3, Caspase-8 and Caspase-9 activities in MNV-1-infected RAW264.7 cells collected at serial time points.

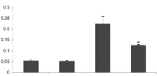


Size: 200 assays, 1000 assays.

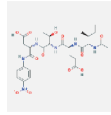
Formulation: In DMSO (2 mM).

Caspase-8 Substrate IETD-pNA — G1004

Caspase-8 Substrate IETD-pNA is a ready-to-use colorimetric substrate for FLICE/Caspase-8 and its related caspases which recognize amino acid sequence-IETD.



I-83 cells were treated with VPA (valproic acid) alone or in combination with LPA (lysophosphatidic acid).

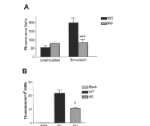


Size: 200 assays, 1000 assays.

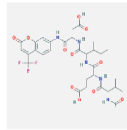
Formulation: In DMSO (4 mM).

Caspase-6 Substrate VEID-AFC — G1005

Caspase-6 Substrate VEID-AFC is a ready-to-use fluorometirc substrate for Caspase-6 and its related caspases which recognize amino acid sequence-VEID.



Impaired transcriptional up-regulation and enzymatic activity of Caspase-6 in p85 β-deficient T cells.

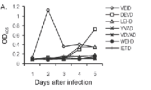


Size: 200 assays, 1000 assays.

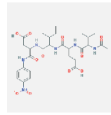
Formulation: In DMSO (1 mM).

Caspase-6 Substrate VEID-pNA — G1006

Caspase-6 Substrate VEID-pNA is a ready-to-use colorimetric substrate for Caspase-6/Mch2 and its related caspases which recognize amino acid sequence-VEID.



Cell extracts were prepared and assayed for caspase activity using the Caspase-6 Substrate VEID-pNA.



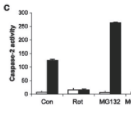
Size: 200 assays, 1000 assays.

Formulation: In DMSO (4 mM).

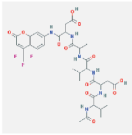
Caspase-2 Substrate VDVAD-AFC

G1007

Caspase-2 Substrate VDVAD-AFC is a ready-to-use fluorometric substrate for caspases which recognize amino acid sequence-VDVAD.



Effect of MG132 and rottelrin on caspase activation.



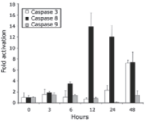
Size: 200 assays, 1000 assays.

Formulation: In DMSO (1 mM).

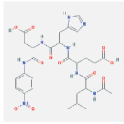
Caspase-9 Substrate LEHD-pNA

G1010

Caspase-9 Substrate LEHD-pNA is a ready-to-use colorimetric substrate for Caspase-9/Mch6 and its related caspases which recognize amino acid sequence-LEHD.



Activity of Caspase-3, -8 and -9 was measured by colorimetric substrate assays with Caspase-9 Substrate LEHD-pNA.



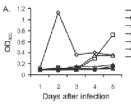
Size: 200 assays, 1000 assays.

Formulation: In DMSO (4 mM).

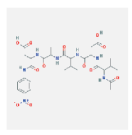
Caspase-2 Substrate VDVAD-pNA

G1008

The Caspase-2 Substrate DEVD-AFC is a ready-to-use colorimetric substrate for Caspase-2/Ich-1 and its related caspases which recognize amino acid sequence- VDVAD.



Cell extracts were prepared and assayed for caspase activity using the Caspase-2 Substrate VDVAD-pNA.



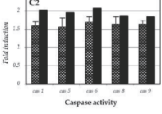
Size: 200 assays, 1000 assays.

Formulation: In DMSO (4 mM).

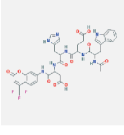
Caspase-5 Substrate WEHD-AFC

G1011

The Caspase-5 Substrate WEHD-AFC is a ready-to-use fluorometric substrate for Caspase-1, -4, -5 and related caspases which recognize amino acid sequence-WEHD.



Caspase activity was measured by Caspase-5 Substrate WEHD-AFC.



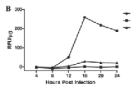
Size: 200 assays, 1000 assays.

Formulation: In DMSO (1 mM).

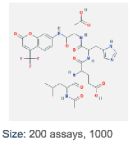
Caspase-9 Substrate LEHD-AFC

G1009

The Caspase-9 Substrate LEHD-AFC is a ready-to-use fluorometric substrate for Caspase-9/Mch-6 and its related caspases which recognize amino acid sequence-LEHD.



Fluorometric analysis of Caspase-3, -8 and -9 activities in MNV-1-infected RAW264.7 cells collected at serial time points.



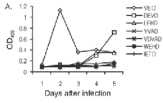
Size: 200 assays, 1000 assays.

Formulation: In DMSO (1 mM).

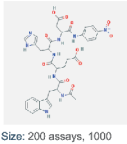
Caspase-5 Substrate WEHD-pNA

G1012

Caspase-5 Substrate WEHD-pNA is a ready-to-use colorimetric substrate for Caspase-5 and its related caspases which recognize amino acid sequence-WEHD.



Cell extracts were prepared and assayed for caspase activity by the Caspase-5 Substrate WEHD-pNA.



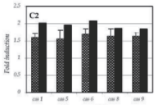
Size: 200 assays, 1000 assays.

Formulation: In DMSO (4 mM).

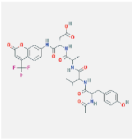
Caspase-1 Substrate YVAD-AFC

G1013

The Caspase-1 Substrate YVAD-AFC is a ready-to-use fluorometirc substrate for Caspase-1/ICE and its related caspases which recognize amino acid sequence-YVAD.



Caspase activity was measured by Caspase-1 Substrate YVAD-AFC.



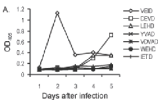
Size: 200 assays, 1000 assays.

Formulation: In DMSO (1 mM).

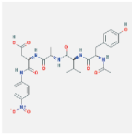
Caspase-1 Substrate YVAD-pNA

G1014

Caspase-1 Substrate YVAD-pNA is a ready-to-use colorimetric substrate for Caspase-1/ICE and its related caspases which recognize amino acid sequence-YVAD.



Cell extracts were prepared and assayed for caspase activity by the Caspase-1 Substrate YVAD-pNA.



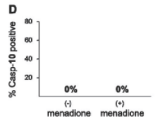
Size: 200 assays, 1000 assays.

Formulation: In DMSO (4 mM).

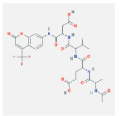
Caspase-10 Substrate AEVD-AFC

G1015

Caspase-10 Substrate AEVD-AFC is a ready-to-use fluorometirc substrate for AEVD-dependent caspases.



Caspase activation with menadione.



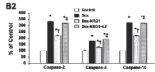
Size: 200 assays, 1000 assays.

Formulation: In DMSO (1 mM).

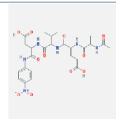
Caspase-10 Substrate AEVD-pNA

G1016

Caspase-10 Substrate AEVD-pNA is a ready-to-use colorimetric substrate for caspases which recognize amino acid sequence-AEVD.



Caspase activation in Dox -treated NRVM (neonatal rat ventricular myocytes).



Size: 200 assays, 1000 assays.

Formulation: In DMSO (4 mM).

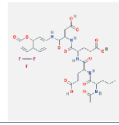
Caspase-13 Substrate LEED-AFC

G1017

Caspase-13 Substrate LEED-AFC is a ready-to-use fluorometirc substrate for Caspase-13 and its related caspases which recognize amino acid sequence-LEED.

Size: 200 assays, 1000 assays.

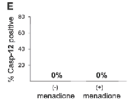
Formulation: In DMSO (4 mM).



Caspase-12 Substrate ATAD-AFC

G1018

Caspase-12 Substrate ATAD-AFC is a ready-to-use fluorometirc substrate for caspases which recognize amino acid sequence-ATAD.



Caspase activation with menadione.

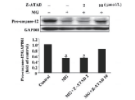
Size: 200 assays, 1000 assays.

Formulation: In DMSO (4 mM).

Caspase-12 Inhibitor Z-ATAD-FMK

G1019

Z-ATAD-FMK is a specific Caspase-12 inhibitor. It suppresses cell apoptosis and also inhibits Caspase-12 activity.



Effects of Z-ATAD-FMK on Caspase-12 activation after the treatment with MG.

Size: 20 µl (10 mM), 100 µl (2 mM).

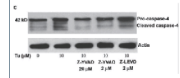
Formulation: In DMSO (2 mM).

Peptide

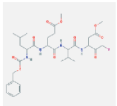
Caspase-4 Inhibitor Z-LEVD-FMK

G1020

Z-LEVD-FMK is a specific Caspase-4 inhibitor that suppresses apoptosis activity.



Caspase-4 activation is reduced by co-incubation with Caspase-4 inhibitor Z-LEVD-FMK and Caspase-1 and -4 inhibitor Z-YVAD-FMK.



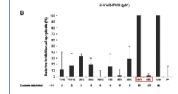
Size: 20 µl (10 mM), 100 µl (2 mM).

Formulation: In DMSO (10 mM).

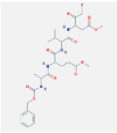
Caspase-10 Inhibitor AEVD-FMK

G1021

Z-AEVD-FMK is a cell-permeable and irreversible Caspase-10 inhibitor that inhibits apoptosis with Ki of 320 nM.



Effect of caspase-specific inhibitors on BoHV-4–induced apoptosis.



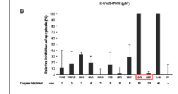
Size: 20 µl (10 mM), 100 µl (2 mM).

Formulation: In DMSO (2 mM).

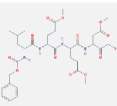
Caspase-13 Inhibitor LEED-FMK

G1022

LEED-FMK is a cell-permeable synthetic peptide inhibitor of Caspase-13 that suppresses apoptosis.



Effect of caspase-specific inhibitors on BoHV-4–induced apoptosis.



Size: 20 µl (10 mM), 100 µl (2 mM).

Formulation: In DMSO (10 mM).

Worldwide Distributors

USA (Headquarter)

ApexBio Technology LLC
Tel: +1-832-696-8203/+1-855-577-7998
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Email: sales@apexbt.com
Website: www.apexbt.com

Australia

Assay Matrix Pty Ltd
Tel: +61 405 701 981
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Website: www.assaymatrix.com

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Fax: +0032 16 50 90 45
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Italy

CliniSciences
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Website: www.clinisciences.com

China

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France (Headquarter)

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Tel: +33 9 77 40 09 09
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Tel: +91-11-43033662,43033664
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Demark

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Fax: +82-2-2690-0397
Email: bioclone@bioclone.co.kr
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Netherlands

GENTAUR Nederland BV
Tel: +0208-080893
Fax: +0497-517897
Email: nl@gentaur.com
Website: www.gentaur.com

Singapore

Vector Biomed Pte Ltd
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Email: sales@vbm.com.sg
Website: www.vbm.com.sg

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