IKK

IκB kinase; I kappa B kinase

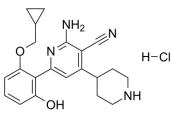
IKK (IκB kinase) is an enzyme complex that is involved in propagating the cellular response to inflammation. An IκB kinase is an enzyme that catalyzes the chemical reaction: ATP + IκB protein ADP + IκB phosphoprotein. The IκB kinase enzyme complex is part of the upstream NF-κB signal transduction cascade. The IκBα (inhibitor of kappa B) protein inactivates the NF-κB transcription factor by masking the nuclear localization signals of NF-κB proteins and keeping them sequestered in an inactive state in the cytoplasm. IKK specifically, phosphorylates the inhibitory IκBα protein. This phosphorylation results in the dissociation of IκBα from NF-κB. NF-κB, which is free migrates into the nucleus and activates the expression of at least 150 genes; some of which are anti-apoptotic. IKK belongs to the family of transferases, specifically those transferring a phosphate group to the sidechain oxygen atom of serine or threonine residues in proteins.

IKK Inhibitors

ACHP Hydrochloride

(IKK-2 Inhibitor VIII) Cat. No.: HY-13060

ACHP Hydrochloride (IKK-2 Inhibitor VIII) is a highly potent and selective **IKK-β** inhibitor with an IC_{50} of 8.5 nM.

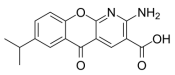


Purity: 99.54%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

Amlexanox

(AA673; Amoxanox; CHX3673) Cat. No.: HY-B0713

Amlexanox (AA673; Amoxanox; CHX3673) is a specific inhibitor of **IKKε** and **TBK1**, and inhibits the IKKε and TBK1 activity determined by MBP phosphorylation with an IC_{50} of approximately 1-2 μM.

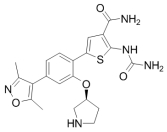


Purity: 99.73%
Clinical Data: Launched
Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg

AZD3264

Cat. No.: HY-19362

AZD3264 is a selective IkB-kinase **IKK2** inhibitor.

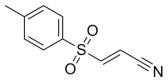


Purity: 98.77%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 2 mg, 5 mg, 10 mg, 50 mg, 100 mg

BAY 11-7082

(BAY 11-7821) Cat. No.: HY-13453

BAY 11-7082 is an **IκBα phosphorylation** and **NF-κB** inhibitor. BAY 11-7082 selectively and irreversibly inhibits the TNF-α-induced phosphorylation of IκB-α, and decreases NF-κB and expression of adhesion molecules.

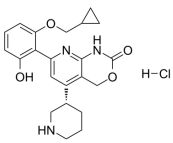


Purity: 99.73%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

Bay 65-1942 hydrochloride

Cat. No.: HY-50948

Bay 65-1942 hydrochloride is an ATP-competitive and selective **IKKβ** inhibitor.

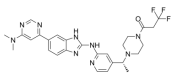


Purity: 99.05%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 2 mg, 5 mg, 10 mg

BAY-985

Cat. No.: HY-133117

BAY-985 is a highly potent, orally active and selective ATP-competitive dual inhibitor of **TBK1** and **IKKε** with IC_{50}s of 2/30 and 2 nM for TBK1 (low/high ATP) and IKKε, respectively. Antitumor efficacy.

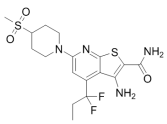


Purity: 99.87%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 50 mg

BI605906

Cat. No.: HY-13019

BI605906 is a novel **IKKβ** inhibitor with an IC_{50} value of 380 nM when assayed at 0.1 mM ATP.

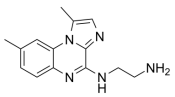


Purity: 99.64%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg

BMS-345541

Cat. No.: HY-10519

BMS-345541 is a selective inhibitor of the catalytic subunits of **IKK** (**IKK-2** IC_{50}=0.3 μM, **IKK-1** IC_{50}=4 μM). BMS-345541 binds at an allosteric site of IKK.

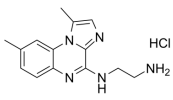


Purity: 99.57%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 50 mg

BMS-345541 hydrochloride

Cat. No.: HY-10518

BMS-345541 hydrochloride is a selective inhibitor of the catalytic subunits of **IKK** (**IKK-2** IC_{50}=0.3 μM, **IKK-1** IC_{50}=4 μM). BMS-345541 binds at an allosteric site of IKK.

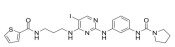


Purity: 99.71%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

BX795

Cat. No.: HY-10514

BX795 is a potent and selective inhibitor of **PDK1**, with an IC_{50} of 6 nM. BX795 is also a potent and relatively specific inhibitor of **TBK1** and **IKKε**, with an IC_{50} of 6 and 41 nM, respectively.



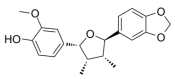
Purity: 99.06%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg, 200 mg

Tel: 609-228-6898 Fax: 609-228-5909 Email: sales@MedChemExpress.com

Chicanine

Cat. No.: HY-N2270

Chicanine is a lignan compound of Schisandra chinesis, inhibits LPS-induced phosphorylation of **p38 MAPK**, **ERK 1/2** and **IκB-α**, with anti-inflammatory activity.



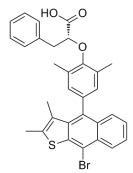
Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Ertiprotafib

(PTP 112)

Cat. No.: HY-19383

Ertiprotafib is an inhibitor of **PTP1B**, **IkB kinase β (IKK-β)**, and a dual **PPARα and PPARβ** agonist, with an IC_{50} of 1.6 μM for PTP1B, 400 nM for IKK-β, an EC_{50} of ~1 μM for PPARα/PPARβ.

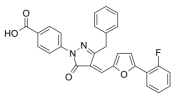


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

GS143

Cat. No.: HY-110261

GS143 is a selec-tive **IκBα ubiquitination** inhibitor with an IC_{50} of 5.2 μM for $SCF^{\beta TrCP1}$-mediated **IκBα ubiquitylation**. GS143 sup-presses **NF-κB** acti-va-tion and tran-scrip-tion of tar-get genes and does not inhibit proteasome activity. GS143 has anti-asthma effect.

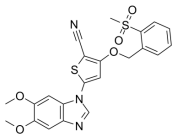


Purity: 98.30%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

GSK319347A

Cat. No.: HY-14682

GSK319347A is a dual inhibitor of **TBK1** and **IKKε** with IC_{50}s of 93 nM and 469 nM, respectively. GSK319347A also inhibits **IKK2** with an IC_{50} of 790 nM.

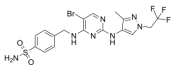


Purity: 98.93%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 1 mg, 5 mg

GSK8612

Cat. No.: HY-111941

GSK8612 is a highly selective and potent **Tank-binding Kinase-1 (TBK1)** inhibitor, with a pIC_{50} of 6.8 for recombinant TBK1.

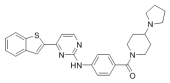


Purity: 98.79%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg

IKK 16

Cat. No.: HY-13687

IKK 16 is a selective IκB kinase (**IKK**) inhibitor for **IKK2**, **IKK complex** and **IKK1** with IC_{50}s of 40 nM, 70 nM and 200 nM, respectively. IKK16 also inhibits leucine-rich repeat kinase-2 (**LRRK2**) with an IC_{50} of 50 nM.

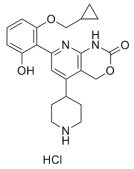


Purity: 99.09%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 10 mg, 50 mg

IKK-IN-1

Cat. No.: HY-13873

IKK-IN-1 is an inhibitor of **IKK** extracted from patent WO2002024679A1, compound example 18-13.



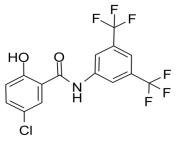
Purity: 95.04%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 1 mg, 5 mg, 10 mg

IMD-0354

(IKK2 Inhibitor V)

Cat. No.: HY-10172

IMD-0354 (IKK2 Inhibitor V) is a selective **IKKβ** inhibitor which inhibits NF-κB activity. IMD0354 inhibits TNF-α induced NF-κB transcription activity with an IC_{50} of 1.2 uM.

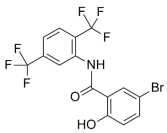


Purity: 99.77%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg

IMD-0560

Cat. No.: HY-105661

IMD-0560 is a novel **IκB kinase β** inhibitor.

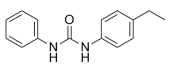


Purity: 98.68%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 1 mg, 5 mg, 10 mg, 50 mg, 100 mg

INH14

Cat. No.: HY-114454

INH14 is a cell permeable inhibitor of **IKKα/IKKβ**, with IC_{50}s of 8.97 and 3.59 μM, respectively. INH14 inhibits the IKKα/β-dependent **TLR** inflammatory response. INH14 also inhibits downstream of TAK1/TAB1 and NF-kB pathways. Anti-inflammatory and anti-cancer activity.

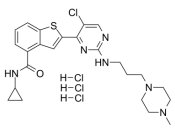


Purity: >98.0%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

LY2409881 trihydrochloride

Cat. No.: HY-B0788A

LY2409881 trihydrochloride is a selective IκB kinase β (**IKK2**) inhibitor with an IC_{50} of 30 nM.

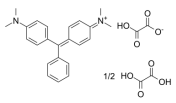


Purity: 98.92%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

Malachite green oxalate

Cat. No.: HY-D0162

Malachite green oxalate is a triphenylmethane dye which can be used to detect the release of phosphate in enzymatic reactions. Malachite green oxalate is also a potent and selective inhibitor of **IKBKE**, and inhibits its downstream targets such as **IκBα**, **p65** and **IRF3**.



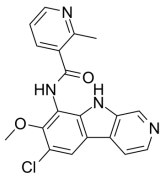
Purity: >98.0%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 100 mg

MLN120B

(ML120B)

Cat. No.: HY-15473

MLN120B (ML120B) is a potent, ATP competitive, and orally active inhibitor of **IKKβ** with an IC_{50} of 60 nM. MLN120B inhibits multiple myeloma cell growth in vitro and in vivo and also can be used for the research of rheumatoid arthritis.

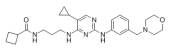


Purity: 99.94%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg

MRT67307

Cat. No.: HY-13018

MRT67307 is a dual inhibitor of the **IKKε** and **TBK-1** with IC_{50}s of 160 and 19 nM, respectively. MRT67307 also inhibits **ULK1** and **ULK2** with IC_{50}s of 45 and 38 nM, respectively. MRT67307 also blocks **autophagy** in cells.

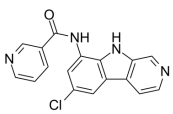


Purity: 99.34%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

PS-1145

Cat. No.: HY-18008

PS-1145 is an IκB kinase (**IKK**) inhibitor with an IC_{50} of 88 nM.



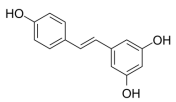
Purity: 99.88%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

Resveratrol

(trans-Resveratrol; SRT501)

Cat. No.: HY-16561

Resveratrol (trans-Resveratrol; SRT501), a natural polyphenolic phytoalexin that possesses anti-oxidant, anti-inflammatory, cardioprotective, and anti-cancer properties.

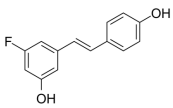


Purity: 99.70%
Clinical Data: Launched
Size: 10 mM × 1 mL, 200 mg, 500 mg

Resveratrol analog 1

Cat. No.: HY-136203

Resveratrol analog 1 is an analog of Resveratrol (HY-16561), compound 48. Resveratrol is a natural polyphenolic phytoalexin that possesses anti-oxidant, anti-inflammatory, cardioprotective, and anti-cancer properties.



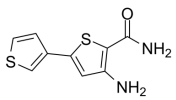
Purity: 98.06%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg

SC-514

(GK 01140)

Cat. No.: HY-13802

SC-514 is a selective **IKK-2** inhibitor (IC_{50}=11.2 μM), which does not inhibit other IKK isoforms or other serine-threonine and tyrosine kinases.

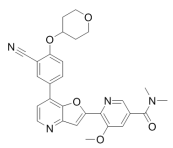


Purity: 99.88%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg

TBK1/IKKε-IN-1

Cat. No.: HY-U00457

TBK1/IKKε-IN-1 is a dual **TBK1** and **IKKε** inhibitor extracted from patent US20160376283 A1, Compound 274 in Example 60, has IC_{50}s of <100 nM.

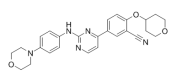


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

TBK1/IKKε-IN-2

Cat. No.: HY-12453

TBK1/IKKε-IN-2 is a dual **TBK1** and **IKKε** inhibitor.

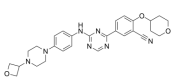


Purity: 98.70%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

TBK1/IKKε-IN-5

Cat. No.: HY-128679

TBK1/IKKε-IN-5 (compound 1) is a dual **TBK1** and **IKKε** inhibitor, with IC_{50} values of 1 nM and 5.6 nM for TBK1 and IKKε, respectively.

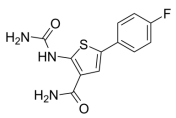


Purity: 99.80%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg

TPCA-1

Cat. No.: HY-10074

TPCA-1 is a potent and selective inhibitor of **IKK-2** with IC_{50} of 17.9 nM. TPCA-1 is an effective inhibitor of **STAT3** phosphorylation, DNA binding, and transactivation.



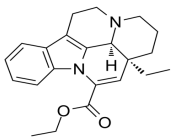
Purity: 99.58%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 100 mg

Vinpocetine

(Ethyl apovincaminate)

Cat. No.: HY-13295

Vinpocetine (Ethyl apovincaminate) is a derivative of the alkaloid Vincamine that blocks voltage-gated Na^+ channels. The IC_{50} value of Vinpocetine on direct **IKK** inhibition in the cell-free system is 17.17 μM.



Purity: 99.77%
Clinical Data: Launched
Size: 10 mM × 1 mL, 50 mg, 100 mg, 200 mg, 500 mg