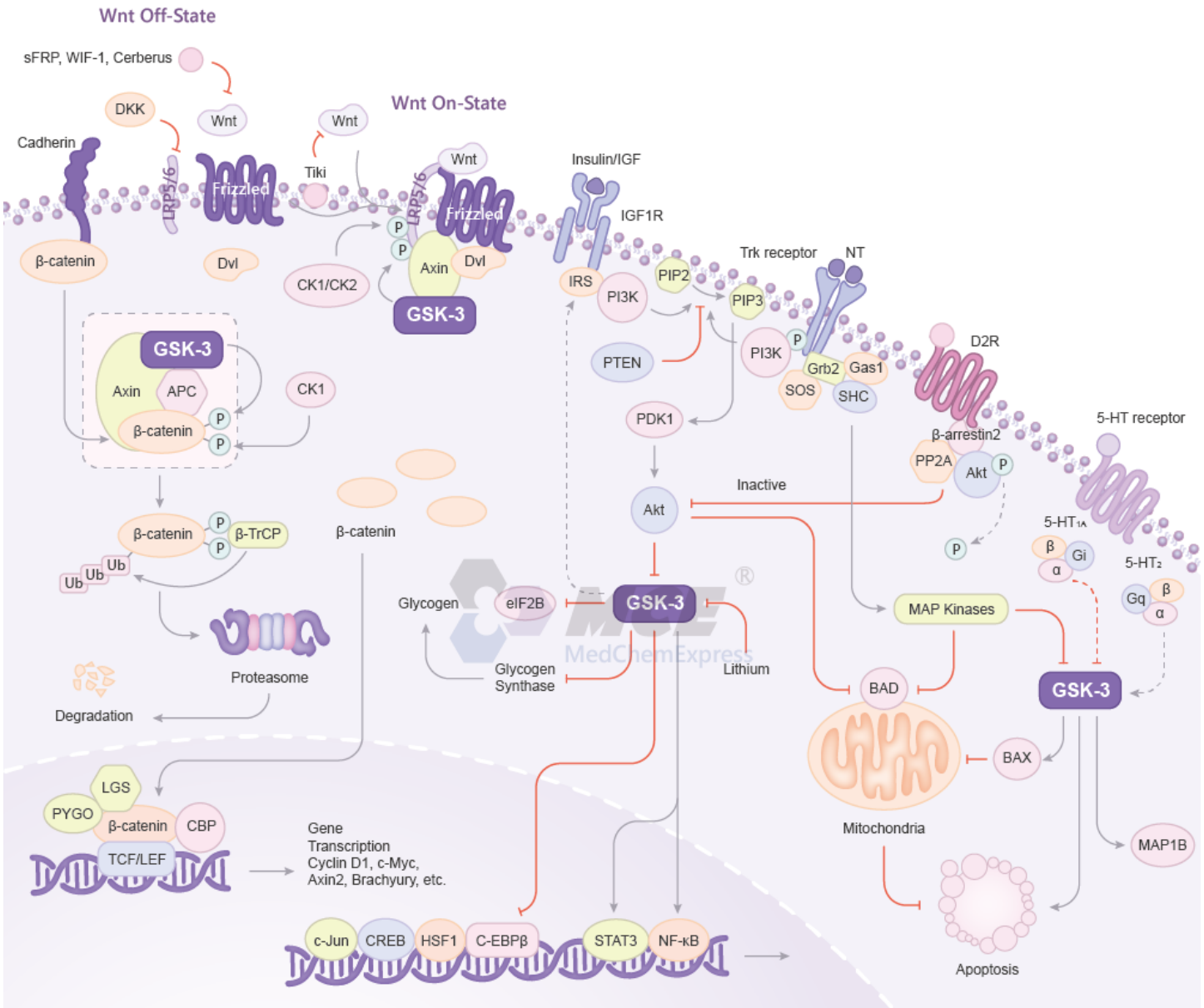
# GSK-3

## Glycogen synthase kinase-3; Glycogen synthase kinase 3

Glycogen synthase kinase 3 (GSK-3) is a multifunctional serine/threonine kinase consisting of two isoforms, alpha and beta. It is a highly conserved negative regulator of receptor tyrosine kinase, cytokine, and Wnt signaling pathways. Stimulation of these pathways inhibits GSK-3 to modulate diverse downstream effectors that include transcription factors, nutrient sensors, glycogen synthesis, mitochondrial function, circadian rhythm, and cell fate. GSK-3 also regulates alternative splicing in response to T-cell receptor activation, and recent phosphoproteomic studies have revealed that multiple splicing factors and regulators of RNA biosynthesis are phosphorylated in a GSK-3-dependent manner.

The malfunction or aberrant activity of GSK-3 leads to several of disorders, such as Alzheimer's disease (AD) and other neurodegenerative pathologies, and other type of diseases as diabetes, cardiovascular disorders and cancer. GSK-3 is also related to innate immune response against pathogens, which makes GSK-3 an excellent target for therapeutic intervention.





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

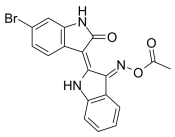
## GSK-3 Inhibitors

### (E/Z)-BIO-acetoxime

**(GSK-3 Inhibitor X)**

Cat. No.: HY-114903

(E/Z)-BIO-acetoxime (GSK-3 Inhibitor X) is a potent and selective **GSK-3α/β** inhibitor, with an $IC_{50}$ of 10 nM. (E/Z)-BIO-acetoxime shows more than 200-flod selectivity over **CDK5/p25**, **CDK2/cyclin A** and **CDK1/cyclin B** ($IC_{50}$=2.4, 4.3, 63 μM).

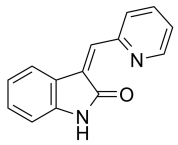


**Purity:** >98%
**Clinical Data:** No Development Reported
**Size:** 5 mg, 10 mg

### (E/Z)-GSK-3β inhibitor 1

Cat. No.: HY-126144A

(E/Z)-GSK-3β inhibitor 1 is a racemic compound of (E)-GSK-3β inhibitor 1 and (Z)-GSK-3β inhibitor 1 isomers. GSK-3β inhibitor 1 (compound 3a) is a **glycogen synthase kinase 3β (GSK-3β)** inhibitor and demonstrates high antidiabetic efficacy, with an $IC_{50}$ of 4.9 nM.

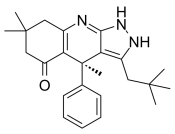


**Purity:** 98.56%
**Clinical Data:** No Development Reported
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 50 mg

### (R)-BRD3731

Cat. No.: HY-124607

(R)-BRD3731 is a **GSK3** inhibitor extracted from patent US20160375006A1, compound example 273, has $IC_{50}$s of 1.05 and 6.7 μM for **GSK3β** and **GSK3α**, respectively.

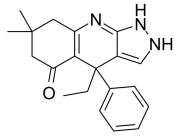


**Purity:** 98.22%
**Clinical Data:** No Development Reported
**Size:** 5 mg, 10 mg, 50 mg, 100 mg

### (Rac)-BRD0705

Cat. No.: HY-116830A

(Rac)-BRD0705 is a less active racemate of BRD0705. BRD0705 is a potent, paralog selective and orally active GSK3α inhibitor with an $IC_{50}$ of 66 nM and a $K_d$ of 4.8 μM. BRD0705 displays increased selectivity for GSK3α (8-fold) versus GSK3β ($IC_{50}$ of 515 nM).



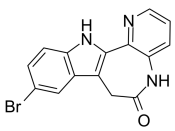
**Purity:** >98%
**Clinical Data:** No Development Reported
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

### 1-Azakenpaullone

**(1-Akp)**

Cat. No.: HY-59090

1-Azakenpaullone (1-Akp) is a highly selective and ATP-competitive inhibitor of **glycogen synthase kinase-3 β (GSK-3β)**, with an $IC_{50}$ value of 18 nM.



**Purity:** 98.20%
**Clinical Data:** No Development Reported
**Size:** 10 mM × 1 mL, 2 mg, 5 mg, 10 mg

### 2B-(SP)

Cat. No.: HY-P1114

2B-(SP) is a eIF2B-based substrate for glycogen synthase kinase-3 (**GSK-3**). 2B-(SP) is readily phosphorylated by both the α and β isoforms of GSK-3.




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

### 2B-(SP) (TFA)

Cat. No.: HY-P1114A

2B-(SP) TFA is a eIF2B-based substrate for glycogen synthase kinase-3 (**GSK-3**). 2B-(SP) TFA is readily phosphorylated by both the α and β isoforms of GSK-3.

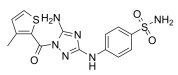



**Purity:** >98%
**Clinical Data:** No Development Reported
**Size:** 1 mg, 5 mg

### 3-Methylthienyl-carbonyl-JNJ-7706621

Cat. No.: HY-141685

3-Methylthienyl-carbonyl-JNJ-7706621 is a potent and selective inhibitor of **cyclin-dependent kinase (CDK)**, with $IC_{50}$s of 6.4 nM and 2 nM for **CDK1/cyclinB** and **CDK2/cyclinA**, respectively.

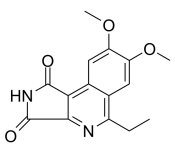


**Purity:** >98%
**Clinical Data:** No Development Reported
**Size:** 1 mg, 5 mg

### 3F8

Cat. No.: HY-107530

3F8 is a potent and selective **GSK-3β** inhibitor that could be useful as new reagent and potential therapeutic candidate for GSK3 related diseases.

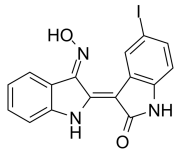


**Purity:** >98%
**Clinical Data:** No Development Reported
**Size:** 1 mg, 5 mg

### 5-Iodo-indirubin-3'-monoxime

Cat. No.: HY-111930

5-Iodo-indirubin-3'-monoxime is a potent **GSK-3β**, **CDK5/P25** and **CDK1/cyclin B** inhibitor, competing with ATP for binding to the catalytic site of the kinase, with $IC_{50}$s of 9, 20 and 25 nM, respectively.

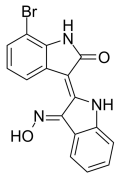


**Purity:** 99.50%
**Clinical Data:** No Development Reported
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

## 7BIO

**(7-Bromoindirubin-3-Oxime)**

Cat. No.: HY-121035

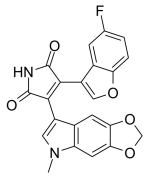


7BIO (7-Bromoindirubin-3-Oxime) is the derivate of indirubin. 7BIO (7-Bromoindirubin-3-Oxime) has inhibitory effects against cyclin-dependent kinase-5 (**CDK5**) and glycogen synthase kinase-3β (**GSK3β**).

**Purity:** ≥98.0%
**Clinical Data:** No Development Reported
**Size:** 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

## 9-ING-41

Cat. No.: HY-113914

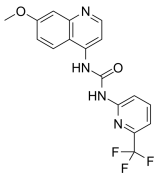


9-ING-41 is a maleimide-based ATP-competitive and selective **glycogen synthase kinase-3β (GSK-3β)** inhibitor with an $IC_{50}$ of 0.71 μM. 9-ING-41 significantly leads to cell cycle arrest, **autophagy** and **apoptosis** in cancer cells.

**Purity:** 99.32%
**Clinical Data:** Phase 2
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

## A 1070722

Cat. No.: HY-107531



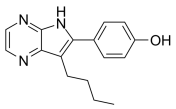
A 1070722 is a potent and selective **glycogen synthase kinase 3 (GSK-3)** inhibitor, with a $K_i$ of 0.6 nM for both GSK-3α and GSK-3β.

**Purity:** 99.48%
**Clinical Data:** No Development Reported
**Size:** 10 mM × 1 mL, 10 mg, 50 mg

## Aloisine A

**(RP107)**

Cat. No.: HY-112363



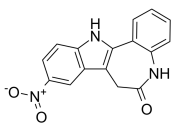
Aloisine A (RP107) is a a potent cyclin-dependent kinase (CDK) inhibitor with $IC_{50}$s of 0.15 μM, 0.12 μM, 0.4 μM, 0.16 μM for CDK1/cyclin B, CDK2/cyclin A, CDK2/cyclin E, CDK5/p35, respectively. Aloisine A ininhibits GSK-3α ($IC_{50}$=0.5 μM) and GSK-3β ($IC_{50}$=1.5 μM).

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

## Alsterpaullone

**(9-Nitropaullone; NSC 705701)**

Cat. No.: HY-108359



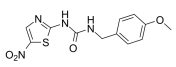
Alsterpaullone (9-Nitropaullone) is a potent **CDK** inhibitor, with $IC_{50}$s of 35 nM, 15 nM, 200 nM and 40 nM for **CDK1/cyclin B**, **CDK2/cyclin A**, **CDK2/cyclin E** and **CDK5/p35**, respectively.

**Purity:** 98.38%
**Clinical Data:** No Development Reported
**Size:** 5 mg, 10 mg

## AR-A014418

**(AR 0133418; GSK 3β inhibitor VIII; AR 014418)**

Cat. No.: HY-10512



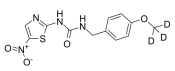
AR-A014418 is a potent, selective and ATP-competitive **GSK3β** inhibitor ($IC_{50}$=104 nM; $K_i$=38 nM).

**Purity:** 99.49%
**Clinical Data:** No Development Reported
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

## AR-A014418-d3

**(AR 0133418-d3; GSK 3β inhibitor VIII-d3; AR 014418-d3)**

Cat. No.: HY-10512S

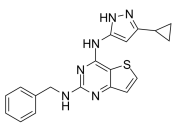


AR-A014418-d3 (AR 0133418-d3) is the deuterium labeled AR-A014418. AR-A014418 is a potent, selective, and ATP-competitive **GSK3β** inhibitor ($IC_{50}$=104 nM; $K_i$=38 nM).

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

## ARN25068

Cat. No.: HY-144290

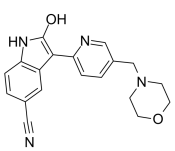


ARN25068 is a sub-micromolar inhibitor of the three protein kinases, **GSK-3β**, **FYN** and **DYRK1A** to tackle tau hyperphosphorylation.

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

## AZD1080

Cat. No.: HY-13862

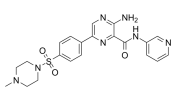


AZD1080 is a potent and selective **GSK3** inhibitor. AZD1080 inhibits recombinant human **GSK3α** and **GSK3β** with **p**$K_i$ ($IC_{50}$) of 8.2 (6.9 nM) and 7.5 (31 nM), respectively.

**Purity:** 99.46%
**Clinical Data:** No Development Reported
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

## AZD2858

Cat. No.: HY-15761



AZD2858 is a potent, orally active **GSK-3** inhibitor, with $IC_{50}$s of 0.9 and 5 nM for **GSK-3α** and **GSK-3β**, respectively, used in the research of fracture healing.

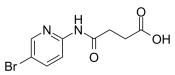
**Purity:** 99.42%
**Clinical Data:** No Development Reported
**Size:** 10 mM × 1 mL, 10 mg, 50 mg

## Bikinin

**(Abrasin)**

Cat. No.: HY-12524

Bikinin is a non-steroidal, ATP-competitive inhibitor of plant **GSK-3/Shaggy-like kinases** and activates BR (brassinosteroids) signaling.



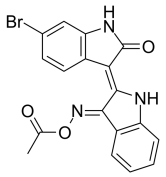
**Purity:** 99.94%
**Clinical Data:** No Development Reported
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

## BIO-acetoxime

**(BIA)**

Cat. No.: HY-15356

BIO-acetoxime (BIA) is a potent and selective **GSK-3** inhibitor, with **$IC_{50}$**s of both 10 nM for GSK-3α/β. BIO-acetoxime has anticonvulsant and anti-infection activity.

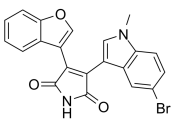


**Purity:** ≥98.0%
**Clinical Data:** No Development Reported
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

## BIP-135

Cat. No.: HY-111055

BIP-135 is a potent and selective ATP-competitive **GSK-3** inhibitor, with **$IC_{50}$**s of 16 nM and 21 nM for GSK-3α and GSK-3β, respectively. BIP 135 exhibits neuroprotective effect.

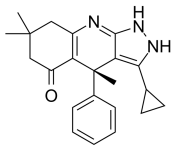


**Purity:** 98.31%
**Clinical Data:** No Development Reported
**Size:** 1 mg, 5 mg, 10 mg

## BRD0209

Cat. No.: HY-117822

BRD0209 is a potent, selective and dual inhibitor of **GSK3α/β** inhibitor (GSK3α **$IC_{50}$** = 19 nM; GSK3β **$IC_{50}$** = 5 nM). BRD0209 is also a reversible ATP-competitive inhibitor with fast-off kinetics (**$K_i$** = 4.2 nM, respectively).

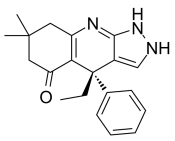


**Purity:** >98%
**Clinical Data:** No Development Reported
**Size:** 1 mg, 5 mg

## BRD0705

Cat. No.: HY-116830

BRD0705 is a potent, paralog selective and orally active **GSK3α** inhibitor with an **$IC_{50}$** of 66 nM and a **$K_d$** of 4.8 μM. BRD0705 displays increased selectivity for **GSK3α** (8-fold) versus GSK3β (**$IC_{50}$** of 515 nM). BRD0705 can be used for acute myeloid leukemia (AML) research.

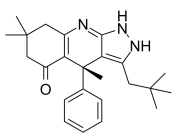


**Purity:** 98.41%
**Clinical Data:** No Development Reported
**Size:** 5 mg, 10 mg, 50 mg, 100 mg

## BRD3731

Cat. No.: HY-124607B

BRD3731 is a selective **GSK3β** inhibitor, with **$IC_{50}$**s of 15 nM and 215 nM for GSK3β and GSK3α, respectively. BRD3731 is potentail for the research of post-traumatic stress disorder (PTSD), psychiatric disorder, diabetes, and neurodegenerative disorders.



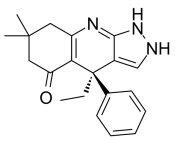
**Purity:** 98.02%
**Clinical Data:** No Development Reported
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

## BRD5648

**((R)-BRD0705)**

Cat. No.: HY-116830B

BRD5648 ((R)-BRD0705) is a negative control of BRD0705. BRD0705 is a potent, paralog selective and orally active GSK3α inhibitor with an $IC_{50}$ of 66 nM and a $K_d$ of 4.8 μM. BRD0705 displays increased selectivity for GSK3α (8-fold) versus GSK3β ($IC_{50}$ of 515 nM).

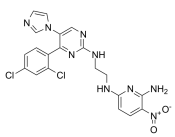


**Purity:** 97.07%
**Clinical Data:** No Development Reported
**Size:** 5 mg, 10 mg, 50 mg, 100 mg

## CHIR-98014

Cat. No.: HY-13076

CHIR-98014 is a potent, cell-permeable **GSK-3** inhibitor with **$IC_{50}$**s of 0.65 and 0.58 nM for **GSK-3α** and **GSK-3β**, respectively; it shows less potent activities against cdc2 and erk2.

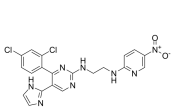


**Purity:** ≥98.0%
**Clinical Data:** No Development Reported
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 50 mg

## CHIR-98023

Cat. No.: HY-126125

CHIR-98023 is a potent, selective and reversible inhibitor of **GSK3**, with **$IC_{50}$**s of 10 nM and 6.7 nM for **GSK3α** and **GSK3β**, respectively. CHIR-98023 can improve insulin action and glucose metabolism.



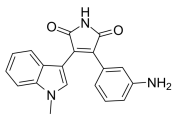
**Purity:** >98%
**Clinical Data:** No Development Reported
**Size:** 5 mg, 10 mg, 50 mg, 100 mg

## CP21R7

**(CP21)**

Cat. No.: HY-100207

CP21R7 is potent **GSK-3β** inhibitor, with an **$IC_{50}$** of 1.8 nM; CP21R7 also shows inhibitory activitiy against **PKCα**, with an **$IC_{50}$** of 1900 nM.

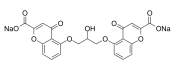


**Purity:** 99.51%
**Clinical Data:** No Development Reported
**Size:** 10 mM × 1 mL, 1 mg, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

## Cromolyn sodium

**(Disodium Cromoglycate; FPL-670)** Cat. No.: HY-B0320A

Cromolyn sodium (Disodium Cromoglycate; FPL-670) is an antiallergic drug. Cromolyn sodium is a **GSK-3β** inhibitor with an $IC_{50}$ of 2.0 μM.

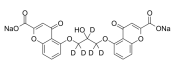


**Purity:** 99.10%
**Clinical Data:** Launched
**Size:** 10 mM × 1 mL, 500 mg, 1 g, 5 g

## Cromolyn-d5 sodium

**(Disodium Cromoglycate-d5; FPL-670-d5)** Cat. No.: HY-B0320AS

Cromolyn-d5 sodium (Disodium Cromoglycate-d5) is the deuterium labeled Cromolyn sodium. Cromolyn sodium (Disodium Cromoglycate; FPL-670) is an antiallergic drug. Cromolyn sodium is a **GSK-3β** inhibitor with an $IC_{50}$ of 2.0 μM.

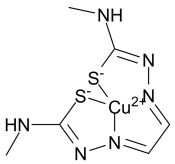


**Purity:** >98%
**Clinical Data:** No Development Reported
**Size:** 1 mg, 5 mg

## Cu(II)GTSM

Cat. No.: HY-139324

Cu(II)GTSM, a cell-permeable Cu-complex, significantly inhibits **GSK3β**. Cu(II)GTSM inhibits Amyloid-β oligomers **(AβOs)** and decreases **tau** phosphorylation. Cu(II)GTSM also decreases the abundance of Amyloid-β trimers. Cu(II)GTSM is a potential anticancer and antimicrobial agent.

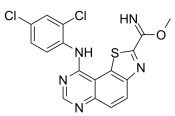


**Purity:** >98%
**Clinical Data:** No Development Reported
**Size:** 1 mg, 5 mg

## EHT 5372

Cat. No.: HY-111379

EHT 5372 is a highly potent and selective inhibitor of **DYRK's** family kinases with $IC_{50}$s of 0.22, 0.28, 10.8, 93.2, 22.8, 88.8, 59.0, 7.44, 221 nM for **DYRK1A**, **DYRK1B** , DYRK2 DYRK3 CLK1, CLK2, CLK4, GSK-3α, GSK-3β.

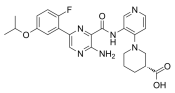


**Purity:** >98%
**Clinical Data:** No Development Reported
**Size:** 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

## GNF4877

Cat. No.: HY-129492

GNF4877 is a potent **DYRK1A** and **GSK3β** inhibitor with $IC_{50}$s of 6nM and 16nM, respectively, which leads to blockade of nuclear factor of activated T-cells (NFATc) nuclear export and increased β-cell proliferation ($EC_{50}$ of 0.66μM for mouse β (R7T1) cells).

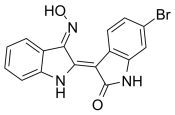


**Purity:** 98.85%
**Clinical Data:** No Development Reported
**Size:** 5 mg, 10 mg, 25 mg, 50 mg

## GSK 3 Inhibitor IX

**(6-Bromoindirubin-3'-oxime; BIO; MLS 2052)** Cat. No.: HY-10580

GSK 3 Inhibitor IX (6-Bromoindirubin-3'-oxime; BIO) is a potent, selective, reversible and ATP-competitive inhibitor of **GSK-3α/β** and **CDK1-cyclinB** complex with $IC_{50}$s of 5 nM/320 nM/80 nM for (GSK-3α/β)/CDK1/CDK5, respectively.

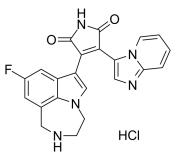


**Purity:** 99.74%
**Clinical Data:** Phase 4
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 50 mg

## GSK-3 inhibitor 1

Cat. No.: HY-13973A

GSK-3 inhibitor 1 is an inhibitor of **GSK-3**.

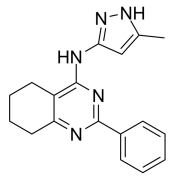


**Purity:** 99.89%
**Clinical Data:** No Development Reported
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

## GSK-3 Inhibitor XIII

Cat. No.: HY-112392

GSK-3 Inhibitor XIII is a potent and ATP-competitive **GSK-3** inhibitor with a $K_i$ of 24 nM.

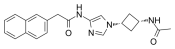


**Purity:** >98%
**Clinical Data:** No Development Reported
**Size:** 5 mg, 10 mg, 25 mg

## GSK-3/CDK5/CDK2-IN-1

Cat. No.: HY-134622

GSK-3/CDK5/CDK2-IN-1, an imidazole derivative, is an inhibitor of **cdk5**, **cdk2**, and **GSK-3** extracted from patent WO2002010141A1, example 9a. GSK-3/CDK5/CDK2-IN-1 can be used for the research of cancer, and neurodegenerative diseases.

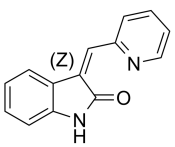


**Purity:** 98.56%
**Clinical Data:** No Development Reported
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

## GSK-3β inhibitor 1

Cat. No.: HY-126144

GSK-3β inhibitor 1 (compound 3a) is a **glycogen synthase kinase 3β (GSK-3β)** inhibitor and demonstrates high antidiabetic efficacy, with an $IC_{50}$ of 4.9 nM.

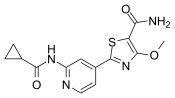


**Purity:** 98.07%
**Clinical Data:** No Development Reported
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 50 mg

## GSK-3β inhibitor 2

Cat. No.: HY-130795

GSK-3β inhibitor 2 (Compound 3) is a potent, selective and orally active **GSK-3β** inhibitor with an $IC_{50}$ of 1.1 nM. GSK-3β inhibitor 2 can cross the blood-brain barrier. GSK-3β inhibitor 2 has the potential for Alzheimer's disease.

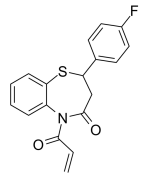


**Purity:** 98.82%
**Clinical Data:** No Development Reported
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

## GSK-3β inhibitor 3

Cat. No.: HY-141480

GSK-3β inhibitor 3 is a potent, selective, irreversible and covalent inhibitor of **Glycogen Synthase Kinase 3β (GSK-3β)**, with an $IC_{50}$ of 6.6 μM. GSK-3β inhibitor 3 can be used for the research of acute promyelocytic leukemia.



**Purity:** 98.20%
**Clinical Data:** No Development Reported
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

## GSK3 Substrate, α, β subunit

Cat. No.: HY-P2558

GSK3 Substrate, α, β subunit is peptide substrate for glycogen synthase kinase-3 (GSK-3) and can be used to measure GSK-3 activity.

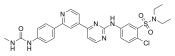
RAAVPPSPSLSRHSSPHQSEDEEE

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

## hSMG-1 inhibitor 11j

Cat. No.: HY-124719

hSMG-1 inhibitor 11j, a pyrimidine derivative, is a potent and selective inhibitor of **hSMG-1**, with an $IC_{50}$ of 0.11 nM. hSMG-1 inhibitor 11j exhibits >455-fold selectivity for hSMG-1 over **mTOR** ($IC_{50}$=50 nM), **PI3Kα/γ** ($IC_{50}$=92/60 nM) and **CDK1/CDK2** ($IC_{50}$=32/7.1 μM).

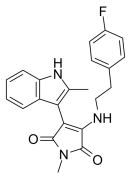


**Purity:** 99.81%
**Clinical Data:** No Development Reported
**Size:** 5 mg, 10 mg

## IM-12

Cat. No.: HY-12292

IM-12 is an inhibitor of **GSK-3β**, with an $IC_{50}$ of 53 nM, and also enhances Wnt signalling.



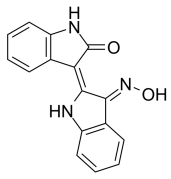
**Purity:** 98.30%
**Clinical Data:** No Development Reported
**Size:** 10 mM × 1 mL, 10 mg, 50 mg, 100 mg

## Indirubin-3'-monoxime

**(Indirubin-3'-oxime)**

Cat. No.: HY-19807

Indirubin-3'-monoxime is a potent **GSK-3β** inhibitor, and weakly inhibits **5-Lipoxygenase**, with $IC_{50}$s of 22 nM and 7.8-10 μM, respectively; Indirubin-3'-monoxime also shows inhibitory activities against CDK5/p25 and CDK1/cyclin B, with $IC_{50}$s of 100 and 180 nM.

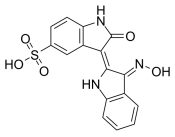


**Purity:** 99.89%
**Clinical Data:** No Development Reported
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 50 mg

## Indirubin-3'-monoxime-5-sulphonic acid

Cat. No.: HY-111931

Indirubin-3'-monoxime-5-sulphonic acid is a potent and selective inhibitor of **CDK1**, **CDK5**, and **GSK-3β** with $IC_{50}$s of 5 nM, 7 nM, and 80 nM, respectively.



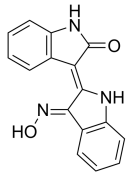
**Purity:** >98%
**Clinical Data:** No Development Reported
**Size:** 1 mg

## Indirubin-3′-oxime

**(IDR3O; I3O)**

Cat. No.: HY-139254

Indirubin-3′-oxime (IDR3O), a synthetic derivative of indirubin, is a potent inhibitor of cyclin-dependent kinases **(CDKs)** and glycogen synthase kinase 3β **(GSK3β)**.

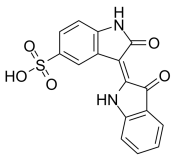


**Purity:** 99.49%
**Clinical Data:** No Development Reported
**Size:** 1 mg, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

## Indirubin-5-sulfonate

Cat. No.: HY-111932

Indirubin-5-sulfonate is a **cyclin-dependent kinase (CDK)** inhibitor, with $IC_{50}$ values of 55 nM, 35 nM, 150 nM, 300 nM and 65 nM for CDK1/cyclin B, CDK2/cyclin A, CDK2/cyclin E, CDK4/cyclin D1, and CDK5/p35, respectively. Indirubin-5-sulfonate also shows inhibitory activity against **GSK-3β**.

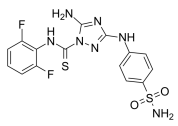


**Purity:** >98%
**Clinical Data:** No Development Reported
**Size:** 1 mg, 5 mg

## K00546

Cat. No.: HY-103647

K00546 is a potent **CDK1** and **CDK2** inhibitor with $IC_{50}$s of 0.6 nM and 0.5 nM for **CDK1/cyclin B** and **CDK2/cyclin A**, respectively. K00546 is also a potent **CDC2-like kinase 1 (CLK1)** and **CLK3** inhibitor with $IC_{50}$s of 8.9 nM and 29.2 nM, respectively.



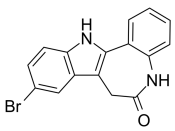
**Purity:** 98.78%
**Clinical Data:** No Development Reported
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

## Kenpaullone

**(9-Bromopaullone; NSC-664704)**

Cat. No.: HY-12302

Kenpaullone is a potent inhibitor of **CDK1/cyclin B** and **GSK-3β**, with $IC_{50}$s of 0.4 μM and 23 nM, and also inhibits CDK2/cyclin A, CDK2/cyclin E, and CDK5/p25 with $IC_{50}$s of 0.68 μM, 7.5 μM, 0.85 μM, respectively.



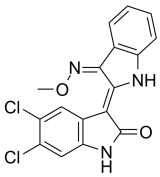
**Purity:** 98.01%
**Clinical Data:** No Development Reported
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 50 mg

## KY19382

**(A3051)**

Cat. No.: HY-131447

KY19382 is a potent and orally active dual inhibitor of **CXXC5-DVL** and **GSK3β**, with $IC_{50}$s of 19 and 10 nM, respectively. KY19382 activates Wnt/β-catenin signaling through inhibitory effects on both CXXC5-DVL interaction and GSK3β activity.



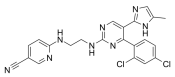
**Purity:** 98.04%
**Clinical Data:** No Development Reported
**Size:** 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

## Laduviglusib

**(CHIR-99021; CT99021)**

Cat. No.: HY-10182

Laduviglusib (CHIR-99021) is a potent and selective **GSK-3α/β** inhibitor with $IC_{50}$s of 10 nM and 6.7 nM. Laduviglusib shows >500-fold selectivity for **GSK-3** over CDC2, ERK2 and other protein kinases.



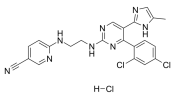
**Purity:** 99.76%
**Clinical Data:** No Development Reported
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

## Laduviglusib monohydrochloride

**(CHIR-99021 monohydrochloride; CT99021 monohydrochloride)**

Cat. No.: HY-10182A

Laduviglusib (CHIR-99021) monohydrochloride is a potent and selective **GSK-3α/β** inhibitor with $IC_{50}$s of 10 nM and 6.7 nM. Laduviglusib monohydrochloride shows >500-fold selectivity for **GSK-3** over CDC2, ERK2 and other protein kinases.



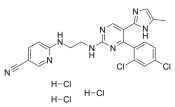
**Purity:** 99.93%
**Clinical Data:** No Development Reported
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

## Laduviglusib trihydrochloride

**(CHIR-99021 trihydrochloride; CT99021 trihydrochloride)**

Cat. No.: HY-10182B

Laduviglusib (CHIR-99021) trihydrochloride is a potent and selective **GSK-3α/β** inhibitor with $IC_{50}$s of 10 nM and 6.7 nM. Laduviglusib trihydrochloride shows >500-fold selectivity for **GSK-3** over CDC2, ERK2 and other protein kinases.

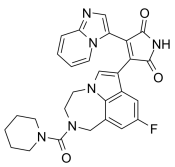


**Purity:** 98.68%
**Clinical Data:** No Development Reported
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 50 mg

## LY2090314

Cat. No.: HY-16294

LY2090314 is a potent inhibitor of **glycogen synthase kinase-3 (GSK-3)** with $IC_{50}$ values of 1.5 nM and 0.9 nM for GSK-3α and GSK-3β, respectively.

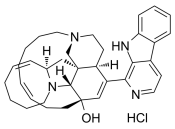


**Purity:** 99.72%
**Clinical Data:** Phase 2
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

## Manzamine A hydrochloride

Cat. No.: HY-117025A

Manzamine A hydrochloride, an orally active beta-carboline alkaloid, inhibits specifically **GSK-3β** and **CDK-5** with $IC_{50}$s of 10.2 μM and 1.5 μM, respectively. Manzamine A hydrochloride targets **vacuolar ATPases** and inhibits **autophagy** in pancreatic cancer cells.

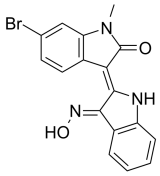


**Purity:** 99.29%
**Clinical Data:** No Development Reported
**Size:** 1 mg, 5 mg

## MeBIO

Cat. No.: HY-103221

MeBIO is a potent **AhR** (aryl hydrocarbon receptor) agonist, with $IC_{50}$ of 44 μM (GSK-3) and 55 μM (CDK1/cyclin B), respectively. MeBIO is inactive on GSK-3β.

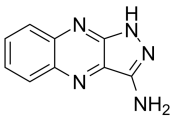


**Purity:** >98%
**Clinical Data:** No Development Reported
**Size:** 1 mg, 5 mg

## NSC693868

Cat. No.: HY-103381

NSC693868 is a selective inhibitor of **CDK1** and **CDK5** with $IC_{50}$s of 600 nM and 400 nM, respectively. NSC693868 less potently inhibits GSK3β with an $IC_{50}$ of 1 μM) and does not block CDC25 activity.



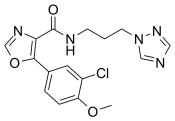
**Purity:** >98%
**Clinical Data:** No Development Reported
**Size:** 1 mg, 5 mg

## PF-04802367

**(PF-367)**

Cat. No.: HY-122026

PF-04802367 (PF-367) is a highly selective **GSK-3** inhibitor with an $IC_{50}$ of 2.1 nM based on a recombinant human GSK-3β enzyme assay and 1.1 nM based on ADP-Glo assay. PF-04802367 shows desirable central nervous system (CNS) properties and potency.



**Purity:** 98.84%
**Clinical Data:** No Development Reported
**Size:** 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

## Phospho-Glycogen Synthase Peptide-2(substrate)

Cat. No.: HY-P1113

Phospho-Glycogen Synthase Peptide-2 (substrate) is peptide substrate for glycogen synthase kinase-3 (**GSK-3**) and can be used for affinity purification of protein-serine kinases.



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

## Phospho-Glycogen Synthase Peptide-2(substrate) TFA

Cat. No.: HY-P1113A

Phospho-Glycogen Synthase Peptide-2 (substrate) is peptide substrate for glycogen synthase kinase-3 (**GSK-3**) and can be used for affinity purification of protein-serine kinases.

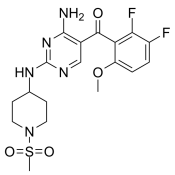


**Purity:** >98%
**Clinical Data:** No Development Reported
**Size:** 1 mg, 5 mg

## R547

Cat. No.: HY-10014

R547 is a potent, selective and orally active ATP-competitive **CDK** inhibitor, with $K_i$s of 2 nM, 3 nM and 1 nM for CDK1/cyclin B, CDK2/cyclin E and CDK4/cyclin D1, respectively.

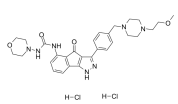


**Purity:** 99.66%
**Clinical Data:** No Development Reported
**Size:** 10 mM × 1 mL, 10 mg, 50 mg

## RGB-286638

Cat. No.: HY-15504

RGB-286638 is a **CDK** inhibitor that inhibits the kinase activity of **cyclin T1-CDK9**, **cyclin B1-CDK1**, **cyclin E-CDK2**, **cyclin D1-CDK4**, **cyclin E-CDK3**, and **p35-CDK5** with $IC_{50}$s of 1, 2, 3, 4, 5 and 5 nM, respectively; also inhibits GSK-3β, TAK1, Jak2 and MEK1, with $IC_{50}$s of 3, 5, 50, and 54 nM.

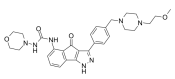


**Purity:** 99.84%
**Clinical Data:** Phase 1
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

## RGB-286638 free base

Cat. No.: HY-15504A

RGB-286638 is a **CDK** inhibitor that inhibits the kinase activity of **cyclin T1-CDK9**, **cyclin B1-CDK1**, **cyclin E-CDK2**, **cyclin D1-CDK4**, **cyclin E-CDK3**, and **p35-CDK5** with $IC_{50}$s of 1, 2, 3, 4, 5 and 5 nM, respectively; also inhibits GSK-3β, TAK1, Jak2 and MEK1, with $IC_{50}$s of 3, 5, 50, and 54 nM.

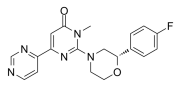


**Purity:** 98.07%
**Clinical Data:** Phase 1
**Size:** 5 mg, 10 mg, 50 mg, 100 mg

## SAR502250

Cat. No.: HY-137472

SAR502250 is a potent, selective, ATP competitive, orally active and brain-penetrant inhibitor of **GSK3**, with an $IC_{50}$ of 12 nM for **human GSK-3β**. SAR502250 displays antidepressant-like activity. SAR502250 can be used for the research of Alzheimer's disease (AD).

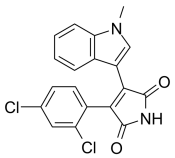


**Purity:** 99.90%
**Clinical Data:** No Development Reported
**Size:** 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

## SB 216763

Cat. No.: HY-12012

SB 216763 is potent, selective and ATP-competitive **GSK-3** inhibitor with $IC_{50}$s of 34.3 nM for both GSK-3α and GSK-3β.

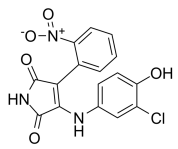


**Purity:** 99.30%
**Clinical Data:** No Development Reported
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

## SB 415286

Cat. No.: HY-15438

SB 415286 is a potent and selective cell permeable inhibitor of **GSK-3α**, with an $IC_{50}$ of 77.5 nM, and a $K_i$ of 30.75 nM; SB 415286 is equally effective at inhibiting human **GSK-3α** and **GSK-3β**.

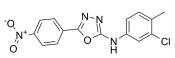


**Purity:** 99.72%
**Clinical Data:** No Development Reported
**Size:** 10 mM × 1 mL, 10 mg, 50 mg

## TC-G 24

Cat. No.: HY-107529

TC-G 24 (Compound 24) is a potent, selective glycogen synthase kinase-3β (**GSK-3β**) inhibitor with an $IC_{50}$ of 17.1 nM. TC-G 24 can cross the BBB and can be used for studying many diseases such as type 2 diabetes mellitus, stroke, Alzheimer, and other related diseases.



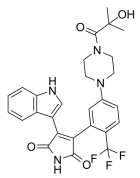
**Purity:** >98%
**Clinical Data:** No Development Reported
**Size:** 1 mg, 5 mg

## TCS 21311

**(NIBR3049)**

Cat. No.: HY-108264

TCS 21311 (NIBR3049) is a potent, highly selective **JAK3** inhibitor with an $IC_{50}$ of 8 nM, it displays >100-fold selectivity over JAK1, JAK2 and TYK2. TCS 21311 (NIBR3049) inhibits **PKCα**, **PKCθ**, and **GSK3β** with $IC_{50}$s of 13, 68, and 3 nM, respectively.

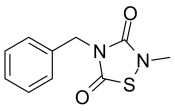


**Purity:** ≥98.0%
**Clinical Data:** No Development Reported
**Size:** 10 mM × 1 mL, 1 mg, 5 mg, 10 mg

## TDZD-8

**(GSK-3β Inhibitor I; NP 01139)** Cat. No.: HY-11012

TDZD-8 is an inhibitor of **GSK-3β**, with an $IC_{50}$ of 2 μM; TDZD-8 shows less potent activities against Cdk-1/cyclinB, CK-II, PKA, and PKC, with all $IC_{50}$s of >100 μM.

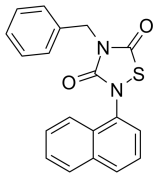


**Purity:** 99.76%
**Clinical Data:** No Development Reported
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

## Tideglusib

**(NP031112)** Cat. No.: HY-14872

Tideglusib (NP031112) is an irreversible **GSK-3** inhibitor with $IC_{50}$s of 5 nM and 60 nM for **GSK-3β**$^{WT}$ (1 h preincubation) and **GSK-3β**$^{C199A}$ (1 h preincubation), respectively.

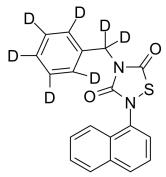


**Purity:** 99.66%
**Clinical Data:** Phase 3
**Size:** 10 mM × 1 mL, 10 mg, 50 mg, 100 mg

## Tideglusib-d7

**(NP031112-d7)** Cat. No.: HY-14872S

Tideglusib-d7 (NP031112-d7) is the deuterium labeled Tideglusib. Tideglusib (NP031112) is an irreversible **GSK-3** inhibitor with $IC_{50}$s of 5 nM and 60 nM for **GSK-3β**$^{WT}$ (1 h preincubation) and **GSK-3β**$^{C199A}$ (1 h preincubation), respectively.

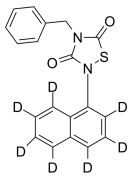


**Purity:** >98%
**Clinical Data:** No Development Reported
**Size:** 1 mg, 5 mg

## Tideglusib-d7-1

**(NP031112-d7)** Cat. No.: HY-14872S1

Tideglusib-d7-1 (NP031112-d7) is the deuterium labeled Tideglusib. Tideglusib (NP031112) is an irreversible **GSK-3** inhibitor with $IC_{50}$s of 5 nM and 60 nM for **GSK-3β**$^{WT}$ (1 h preincubation) and **GSK-3β**$^{C199A}$ (1 h preincubation), respectively.

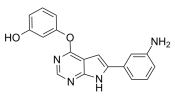


**Purity:** >98%
**Clinical Data:** No Development Reported
**Size:** 1 mg, 5 mg

## TWS119

Cat. No.: HY-10590

TWS119 is a specific inhibitor of **GSK-3β**, with an $IC_{50}$ of 30 nM, and activates the wnt/β-catenin pathway.

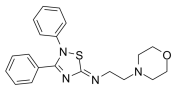


**Purity:** ≥98.0%
**Clinical Data:** No Development Reported
**Size:** 10 mM × 1 mL, 10 mg, 50 mg, 100 mg

## VP3.15

Cat. No.: HY-128879

VP3.15 is a potent, orally bioavailable and CNS-penetrant dual **phosphodiesterase (PDE)7-glycogen synthase kinase (GSK)3** inhibitor, with $IC_{50}$s of 1.59 μM and 0.88 μM for PDE7 and GSK-3, respectively.

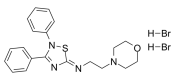


**Purity:** >98%
**Clinical Data:** No Development Reported
**Size:** 1 mg, 5 mg

## VP3.15 dihydrobromide

Cat. No.: HY-128879A

VP3.15 dihydrobromide is a potent, orally bioavailable and CNS-penetrant dual **phosphodiesterase (PDE)7- glycogen synthase kinase (GSK)3** inhibitor, with $IC_{50}$s of 1.59 μM and 0.88 μM for PDE7 and GSK-3, respectively.

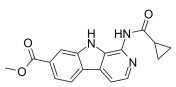


**Purity:** 98.22%
**Clinical Data:** No Development Reported
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

## ZDWX-25

Cat. No.: HY-144826

ZDWX-25 is a highly potent **GSK-3β** and **DYRK1A** dual inhibitor with an $IC_{50}$ value of 71 nM for GSK-3β. ZDWX-25 possesses significant cytotoxic activities against SH-SY5Y and HL-7702 cells. ZDWX-25 can be used for researching alzheimer's disease.

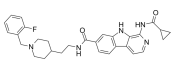


**Purity:** >98%
**Clinical Data:** No Development Reported
**Size:** 1 mg, 5 mg

## ZLWH-23

Cat. No.: HY-144316

ZLWH-23 is a selective **AChE** inhibitor ($IC_{50}$=0.27 μM) with **GSK-3β** inhibitory property ($IC_{50}$=6.78 μM). ZLWH-23 possesses selectivity for AChE over BChE ($IC_{50}$=20.82 μM) and for GSK-3β over multi-kinases. ZLWH-23 has the potential for the research of Alzheimer's disease.



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