Insulin Receptor

Insulin receptor (IR) is a transmembrane receptor that is activated by insulin, IGF-I, IGF-II and belongs to the large class of tyrosine kinase receptors. Metabolically, the insulin receptor plays a key role in the regulation of glucose homeostasis, a functional process that under degenerate conditions may result in a range of clinical manifestations including diabetes and cancer. Biochemically, the insulin receptor is encoded by a single gene INSR, from which alternate splicing during transcription results in either IR-A or IR-B isoforms. Downstream post-translational events of either isoform result in the formation of a proteolytically cleaved α and β subunit, which upon combination are ultimately capable of homo or hetero-dimerisation to produce the ≈320 kDa disulfide-linked transmembrane insulin receptor.

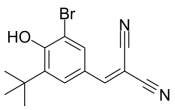
Insulin Receptor Inhibitors, Agonists, Antagonists, Activators & Modulators

AG1024

(Tyrphostin AG 1024)

Cat. No.: HY-10253

AG1024 (Tyrphostin AG 1024) is a reversible, competitive and selective **IGF-1R** inhibitor with an IC_{50} of 7 μM. AG1024 inhibits phosphorylation of **IR** (IC_{50}=57 μM). AG1024 induces **apoptosis** and has anti-cancer activity.

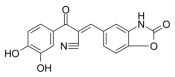


Purity: 97.16%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

AGL-2263

Cat. No.: HY-112720

AGL-2263 is an **insulin receptor** and **insulin-like growth factor (IGF) receptor** inhibitor.

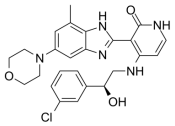


Purity: 95.80%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg

BMS-536924

Cat. No.: HY-10262

BMS-536924 is an orally active, competitive and selective **insulin-like growth factor receptor (IGF-1R)** kinase and **insulin receptor (IR)** inhibitor with IC_{50}s of 100 nM and 73 nM, respectively. BMS-536924 has anti-cancer activity.

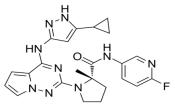


Purity: 99.74%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg

BMS-754807

Cat. No.: HY-10200

BMS-754807 is a potent and reversible **IGF-1R/IR** inhibitor (IC_{50}=1.8 and 1.7 nM, respectively; K_i=<2 nM for both). BMS-754807 also shows potent activities against Met, RON, TrkA, TrkB, AurA, and AurB with IC_{50} values of 6, 44, 7, 4, 9, and 25 nM, respectively.



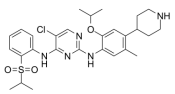
Purity: 99.76%
Clinical Data: Phase 2
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

Ceritinib

(LDK378)

Cat. No.: HY-15656

Ceritinib (LDK378) is a selective, orally bioavailable, and ATP-competitive **ALK** tyrosine kinase inhibitor with an IC_{50} of 200 pM. Ceritinib (LDK378) also inhibits **IGF-1R**, **InsR**, and **STK22D** with IC_{50} values of 8, 7, and 23 nM, respectively. Ceritinib (LDK378) shows great antitumor potency.



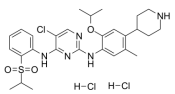
Purity: 99.97%
Clinical Data: Launched
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg

Ceritinib dihydrochloride

(LDK378 dihydrochloride)

Cat. No.: HY-15656A

Ceritinib dihydrochloride (LDK378 dihydrochloride) is a selective, orally bioavailable and ATP-competitive **ALK** tyrosine kinase inhibitor with an IC_{50} of 200 pM.



Purity: 99.83%
Clinical Data: Launched
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

GIP (1-30) amide, porcine

Cat. No.: HY-P2541

GIP (1-30) amide, porcine is a full glucose-dependent insulinotropic polypeptide (GIP) receptor agonist with high affinity equal to native GIP(1-42).

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

GIP (3-42), human

Cat. No.: HY-P2542

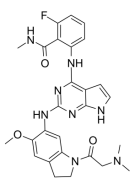
GIP (3-42), human acts as a glucose-dependent insulinotropic polypeptide (GIP) receptor antagonist, moderating the insulin secreting and metabolic actions of GIP in vivo.

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

GSK1838705A

Cat. No.: HY-13020

GSK1838705A is a potent and reversible **IGF-IR** and the **insulin receptor** inhibitor with IC_{50}s of 2.0 and 1.6 nM, respectively. It also inhibits **ALK** with an IC_{50} of 0.5 nM.

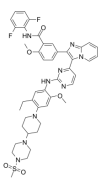


Purity: 99.28%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

GSK1904529A

Cat. No.: HY-10524

GSK1904529A is a potent, selective, orally active, and ATP-competitive inhibitor of **insulin-like growth factor-1 receptor (IGF-1R)** and **insulin receptor (IR)**, with IC_{50}s of 27 and 25 nM, respectively.



Purity: 99.22%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg

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

Insulin (human)

Cat. No.: HY-P0035

Insulin (human) is a polypeptide hormone that regulates the level of glucose.

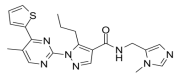
Insulin (human)

Purity: 96.90%
Clinical Data: Launched
Size: 25 mg, 50 mg, 100 mg

Insulin levels modulator

Cat. No.: HY-112819

Insulin levels modulator could be used to treat diabetes.



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

Insulin(cattle)

(Insulin from bovine pancreas)

Cat. No.: HY-P1156

Insulin cattle (Insulin from bovine pancreas) is a two-chain polypeptide hormone produced in vivo in the pancreatic β cells. Insulin cattle has often been used as growth supplement in culturing cells.

Insulin(cattle)

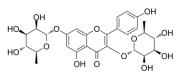
Purity: 98.60%
Clinical Data: No Development Reported
Size: 10 mg, 25 mg, 50 mg, 100 mg

Kaempferitrin

(Lespedin; Lespenephryl)

Cat. No.: HY-N0628

Kaempferitrin is a natural flavonoid, possesses antinociceptive, anti-inflammatory, anti-diabetic, antitumoral and chemopreventive effects, and activates **insulin** signaling pathway.

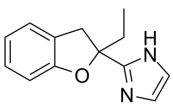


Purity: 99.12%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 1 mg, 5 mg, 10 mg

KU14R

Cat. No.: HY-15481

KU14R is a new I(3)-R antagonist, which selectively blocks the insulin secretory response to imidazolines.



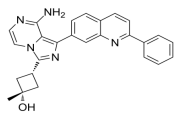
Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Linsitinib

(OSI-906)

Cat. No.: HY-10191

Linsitinib (OSI-906) is a potent, selective and orally bioavailable dual inhibitor of the **IGF-1 receptor** and **insulin receptor (IR)** with IC_{50}s of 35 and 75 nM, respectively.



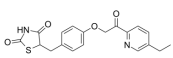
Purity: 99.90%
Clinical Data: Phase 3
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

MSDC 0160

(Mitoglitazone; CAY10415)

Cat. No.: HY-100550

MSDC 0160 (Mitoglitazone) is a mitochondrial target of thiazolidinediones (mTOT)-modulating **insulin sensitizer** and a modulator of **mitochondrial pyruvate carrier (MPC)**. MSDC 0160 is a thiazolidinedione (TZD) with antidiabetic and neuroprotective activities.



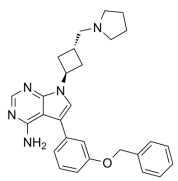
Purity: 99.40%
Clinical Data: Phase 2
Size: 10 mM × 1 mL, 2 mg, 5 mg, 10 mg, 50 mg, 100 mg

NVP-ADW742

(ADW742; GSK 552602A; ADW)

Cat. No.: HY-10252

NVP-ADW742 (ADW742) is an orally active, selective **IGF-1R tyrosine kinase** inhibitor with an IC_{50} of 0.17 μM. NVP-ADW742 inhibits **insulin receptor (InsR)** with an IC_{50} of 2.8 μM. NVP-ADW742 induces pleiotropic antiproliferative/**proapoptotic** biologic sequelae in tumor cells.



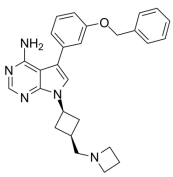
Purity: 99.30%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

NVP-AEW541

(AEW541)

Cat. No.: HY-50866

NVP-AEW541 is a potent inhibitor of **IGF-1R** with IC_{50} of 0.15 μM, also inhibits **InsR**, with IC_{50} of 0.14 μM.



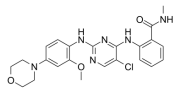
Purity: >99.0%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 2 mg, 5 mg, 10 mg, 50 mg, 100 mg

NVP-TAE 226

(TAE226)

Cat. No.: HY-13203

NVP-TAE 226 (TAE226) is a potent and ATP-competitive dual **FAK** and **IGF-1R** inhibitor with IC_{50}s of 5.5 nM and 140 nM, respectively. NVP-TAE 226 (TAE226) also effectively inhibits **Pyk2** and **insulin receptor (InsR)** with IC_{50}s of 3.5 nM and 44 nM, respectively.

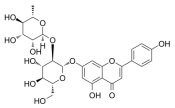


Purity: 99.92%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

Rhoifolin

Cat. No.: HY-N0755

Rhoifolin is a flavone glycoside isolated from Citrus grandis (L.) Osbeck leaves. Rhoifolin is beneficial for diabetic complications through enhanced adiponectin secretion, tyrosine phosphorylation of **insulin receptor-β** and **glucose transporter 4 (GLUT 4)** translocation.



Purity: 99.24%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 20 mg

S961 acetate

Cat. No.: HY-P2093B

S961 acetate is an high-affinity and selective **insulin receptor** (**IR**) antagonist with **IC_{50}**s of 0.048, 0.027, and 630 nM for HIR-A, HIR-B, and human insulin-like growth factor I receptor (HIGF-IR) in SPA-assay, respectively.

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

S961 TFA

Cat. No.: HY-P2093A

S961 TFA is an high-affinity and selective **insulin receptor** (**IR**) antagonist with **IC_{50}**s of 0.048, 0.027, and 630 nM for HIR-A, HIR-B, and human insulin-like growth factor I receptor (HIGF-IR) in SPA-assay, respectively.

Purity: 97.60%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg, 10 mg