# Insulin Receptor

Insulin receptor (IR), a phylogenetically ancient tyrosine kinase receptor, is a large cell surface glycoprotein that concentrates insulin at the site of action and also initiates responses to insulin. The receptor is a disulfide-linked oligomer comprised of two alpha and two beta subunits. The insulin receptor exists in two isoforms, IR-A and IR-B, expressed in different relative abundance in the various organs and tissues. The two IR isoforms have similar binding affinity for insulin but different affinity for insulin-like growth factor (IGF)-2 and proinsulin, which are bound by IR-A but not IR-B.

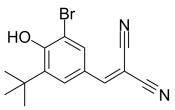
The insulin receptor has a crucial role in controlling glucose homeostasis, regulating lipid, protein and carbohydrate metabolism, and modulating brain neurotransmitter levels. Insulin receptor dysfunction has been associated with many diseases, including diabetes, cancer and Alzheimer's disease.

## 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.

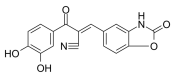


**Purity:** 98.86%
**Clinical Data:** No Development Reported
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

## AGL-2263

Cat. No.: HY-112720

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

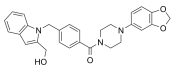


**Purity:** 97.04%
**Clinical Data:** No Development Reported
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg

## AVJ16

Cat. No.: HY-144873

AVJ16 is a member of the insulin-like growth factor 2 mRNA-binding protein family. AVJ16 regulates protein translation by binding to the mRNAs of certain genes.

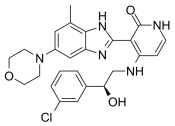


**Purity:** >98%
**Clinical Data:** No Development Reported
**Size:** 1 mg, 5 mg

## 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.

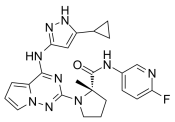


**Purity:** 99.74%
**Clinical Data:** No Development Reported
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

## 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.



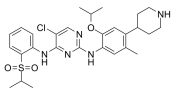
**Purity:** 99.76%
**Clinical Data:** Phase 2
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

## 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.



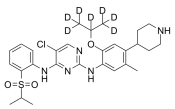
**Purity:** 99.97%
**Clinical Data:** Launched
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg

## Ceritinib D7

**(LDK378 D7)**

Cat. No.: HY-15656S

Ceritinib D7 (LDK378 D7) is a deuterium labeled Ceritinib. Ceritinib is a selective, orally bioavailable and ATP-competitive ALK tyrosine kinase inhibitor.



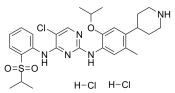
**Purity:** >98%
**Clinical Data:** No Development Reported
**Size:** 1 mg, 5 mg

## 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

## DA-JC4

Cat. No.: HY-P3255

DA-JC4 is a dual **GLP-1/GIP receptor** agonist and can be used for the research of neurological disease and insulin signaling pathways.



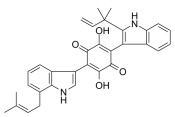
**Purity:** 96.57%
**Clinical Data:** No Development Reported
**Size:** 5 mg

## Demethylasterriquinone B1

**(DAQ B1; L-783281; Dimethylasterriquinone)**

Cat. No.: HY-107586

Demethylasterriquinone B1 is a selective **insulin receptor** activator. Demethylasterriquinone B1 stimulates tyrosine phosphorylation of the **IR β** subunit, and the activation of **PIK3** and **AKT**.



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


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

## 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). GIP (1-30) amide, porcine is a weak inhibitor of gastric acid secretion and potent stimulator of insulin.



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

## GIP (1-30) amide, porcine TFA

Cat. No.: HY-P2541A

GIP (1-30) amide, porcine TFA is a full glucose-dependent insulinotropic polypeptide (GIP) receptor agonist with high affinity equal to native GIP(1-42). GIP (1-30) amide, porcine is a weak inhibitor of gastric acid secretion and potent stimulator of insulin.



**Purity:** 98.55%
**Clinical Data:** No Development Reported
**Size:** 5 mg, 10 mg

## GIP (1-30) amide,human

Cat. No.: HY-P2080

GIP (1-30) amide,human is a glucose-dependent insulinotropic polypeptide (GIP) fragment. GIP is an incretin hormone that stimulates insulin secretion and reduces postprandial glycaemic excursions.



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

## GIP (1-30) amide,human acetate

Cat. No.: HY-P2080B

GIP (1-30) amide,human acetate is a glucose-dependent insulinotropic polypeptide (GIP) fragment. GIP is an incretin hormone that stimulates insulin secretion and reduces postprandial glycaemic excursions.



**Purity:** 98.26%
**Clinical Data:** No Development Reported
**Size:** 1 mg, 5 mg, 10 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:** 98.24%
**Clinical Data:** No Development Reported
**Size:** 1 mg, 5 mg, 10 mg

## GIP, human

**(Gastric Inhibitory Peptide (GIP), human)**

Cat. No.: HY-P0276

GIP, human, a peptide hormone consisting of 42 amino acids, is a stimulator of glucose-dependent insulin secretion and a weak inhibitor of gastric acid secretion. GIP, human acts as an incretin hormone released from intestinal K cells in response to nutrient ingestion.



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

## GIP, human TFA

**(Gastric Inhibitory Peptide (GIP), human TFA)**

Cat. No.: HY-P0276A

GIP, human TFA, a peptide hormone consisting of 42 amino acids, is a stimulator of **glucose-dependent insulin secretion** and a weak inhibitor of gastric acid secretion. GIP, human TFA acts as an incretin hormone released from intestinal K cells in response to nutrient ingestion.

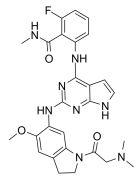


**Purity:** 96.24%
**Clinical Data:** No Development Reported
**Size:** 1 mg

## 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.

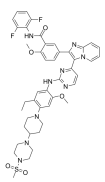


**Purity:** 99.28%
**Clinical Data:** No Development Reported
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

## 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.

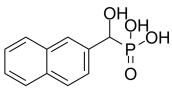


**Purity:** 99.22%
**Clinical Data:** No Development Reported
**Size:** 10 mM × 1 mL, 10 mg, 50 mg, 100 mg

## HNMPA

Cat. No.: HY-101962

HNMPA is a membrane impermeable **insulin receptor tyrosine kinase** inhibitor. HNMPA inhibits serine and tyrosine autophosphorylation by the human insulin receptor. HNMPA has no effect on protein kinase C or cyclic AMP-dependent protein kinase activities.

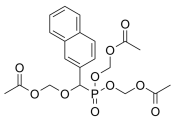


**Purity:** >98%
**Clinical Data:** No Development Reported
**Size:** 5 mg, 10 mg

## HNMPA-(AM)3

Cat. No.: HY-124097

HNMPA-(AM)3 is a cell-permeable and selective **insulin receptor tyrosine kinase** inhibitor analog of HNMPA. HNMPA-(AM)3 greatly inhibits the ability of prothoracicotropic hormone (PTTH) to activate ERK phosphorylation and stimulate ecdysteroidogenesis.



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

## 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 glargine

Cat. No.: HY-108719

Insulin glargine is a long-acting insulin analog. Insulin glargine can be used for the diabetes mellitus.

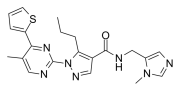


**Purity:** >98%
**Clinical Data:** Launched
**Size:** 1 mg, 5 mg

## 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)

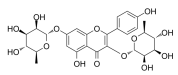
**Purity:** 98.60%
**Clinical Data:** No Development Reported
**Size:** 10 mg, 25 mg, 50 mg, 100 mg

## 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.

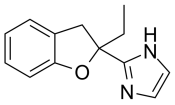


**Purity:** 99.94%
**Clinical Data:** No Development Reported
**Size:** 10 mM × 1 mL, 1 mg, 5 mg, 10 mg

## KU14R

Cat. No.: HY-15481

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



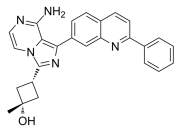
**Purity:** >98%
**Clinical Data:** No Development Reported
**Size:** 1 mg, 5 mg

## 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.



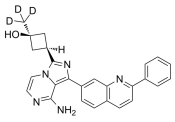
**Purity:** 99.88%
**Clinical Data:** Phase 3
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

## Linsitinib-d3

**(OSI-906-d3)**

Cat. No.: HY-10191S

Linsitinib-d3 (OSI-906-d3) is the deuterium labeled Linsitinib. 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.

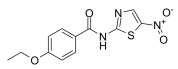


**Purity:** >98%
**Clinical Data:** No Development Reported
**Size:** 1 mg, 5 mg

## MID-1

Cat. No.: HY-115461

MID-1 is a disruptor of **MG53-IRS-1** (Mitsugumin 53-insulin receptor substrate-1) interaction.

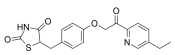


**Purity:** 99.91%
**Clinical Data:** No Development Reported
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

## 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.

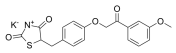


**Purity:** 99.40%
**Clinical Data:** Phase 2
**Size:** 10 mM × 1 mL, 2 mg, 5 mg, 10 mg, 50 mg, 100 mg

## MSDC-0602K

**(Azemiglitazone potassium)** Cat. No.: HY-108022A

MSDC-0602K (Azemiglitazone potassium), a **PPARγ**-sparing thiazolidinedione (Ps-TZD), binds to PPARγ with the **$IC_{50}$** of 18.25 μM. MSDC-0602K modulates the mitochondrial pyruvate carrier (MPC).

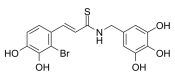


**Purity:** >98%
**Clinical Data:** No Development Reported
**Size:** 1 mg, 5 mg

## NT219

Cat. No.: HY-145935

NT219 is a potent and dual inhibitor of insulin receptor substrates 1/2 (**IRS1/2**) and **STAT3**. IRS1/2 and STAT3 are major signaling junctions regulated by various oncogenes. NT219 affects IRS1/2 degradation and inhibits STAT3 phosphorylation.

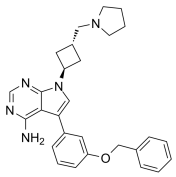


**Purity:** >98%
**Clinical Data:** No Development Reported
**Size:** 1 mg, 5 mg

## 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.

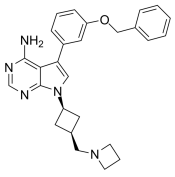


**Purity:** 99.30%
**Clinical Data:** No Development Reported
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

## NVP-AEW541

**(AEW541)** Cat. No.: HY-50866

NVP-AEW541 (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.

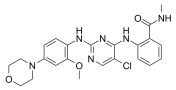


**Purity:** 98.90%
**Clinical Data:** No Development Reported
**Size:** 10 mM × 1 mL, 2 mg, 5 mg, 10 mg, 50 mg, 100 mg

## 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

## OI338

Cat. No.: HY-142663

OI338 is an orally available, ultralong-acting insulin analogue.

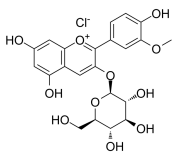
OI338

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

## Peonidin 3-O-glucoside chloride

Cat. No.: HY-W040127

Peonidin 3-O-glucoside chloride, an anthocyanin, act as an insulin secretagogue. Peonidin 3-O-glucoside chloride can increase glucose uptake in HepG2 cells. Peonidin 3-O-glucoside chloride has the potential for type-2 diabetes comorbidities research.

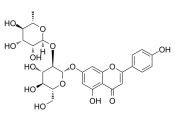


**Purity:** >98%
**Clinical Data:** No Development Reported
**Size:** 1 mg, 5 mg

## 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

Cat. No.: HY-P2093

S961 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 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:** 99.52%
**Clinical Data:** No Development Reported
**Size:** 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.

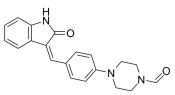


**Purity:** 97.60%
**Clinical Data:** No Development Reported
**Size:** 1 mg, 5 mg, 10 mg

## SU4984

Cat. No.: HY-118203

SU4984 is a protein tyrosine kinase inhibitor, with an $IC_{50}$ of 10-20 μM for **fibroblast growth factor receptor 1 (FGFR1)**. SU4984 is also inhibits **platelet-derived growth factor receptor**, and **insulin receptor**. SU4984 can be used for the research of cancer.



**Purity:** 99.94%
**Clinical Data:** No Development Reported
**Size:** 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg