TGF-β Receptor

Transforming growth factor beta receptors

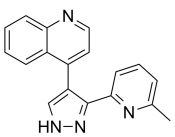
TGF-β receptors (Transforming growth factor-β receptors) are single pass serine/threonine kinase receptors. Transforming growth factor beta (TGF-beta) is a member of a large family of pleiotropic cytokines that are involved in many biological processes, including growth control, differentiation, migration, cell survival, adhesion, and specification of developmental fate, in both normal and diseased states. TGF-beta superfamily members signal through a receptor complex comprising a type II and type I receptor, both serine/threonine kinases.

The type I receptors, referred to as activin receptor-like kinases (ALK), lie at the epicenter of the signaling cascade as they transduce TGF-beta signals to intracellular regulators of transcription known as Smad proteins. ALKs possess an extracellular binding domain, a transmembrane domain, a GS domain that serves as the site of activation by type II receptors, and a kinase domain that activates downstream signaling molecules. ALKs mediate the effect of TGF-beta superfamily on a variety of cellular processes such as proliferation, differentiation, apoptosis, adhesion and migration, and therefore play important roles in many biological processes. Some ALKs have been implicated in several disorders, including tumorigenesis and immune diseases, suggesting that these receptors can be used as drug targets.

A 77-01

Cat. No.: HY-78349

A 77-01 is a potent inhibitor of **transforming growth factor (TGF)-β** type I receptor superfamily **activin-like kinase ALK5** with an IC_{50} of 25 nM.

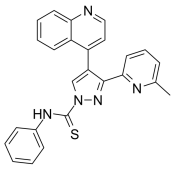


Purity: 99.55%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg

A 83-01

Cat. No.: HY-10432

A 83-01 is a potent inhibitor of TGF-β type I receptor **ALK5 kinase**, type I nodal receptor **ALK4** and type I nodal receptor **ALK7**, with IC_{50}s of 12 nM, 45 nM and 7.5 nM against the transcription induced by **ALK5**, **ALK4** and **ALK7**, respectively.

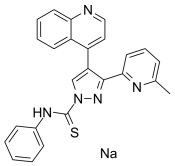


Purity: 98.24%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 50 mg

A 83-01 sodium

Cat. No.: HY-10432A

A 83-01 sodium is a potent inhibitor of **TGF-β type I receptor ALK5 kinase**, **ALK4** and **ALK7**, with IC_{50}s of 12 nM, 45 nM and 7.5 nM against the transcription induced by **ALK5**, **ALK4** and **ALK7**, respectively.

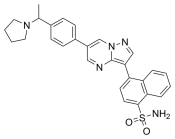


Purity: ≥95.0%
Clinical Data: No Development Reported
Size: 10 mg, 50 mg

ALK2-IN-2

Cat. No.: HY-112815

ALK2-IN-2 is a potent and selective inhibitor of **activin receptor-like kinase 2 (ALK2)** with an IC_{50} of 9 nM, and over 700-fold selectivity against ALK3.

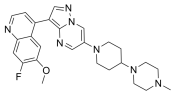


Purity: 99.90%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

ALK2-IN-4

Cat. No.: HY-136773

ALK2-IN-4 is a potent **ALK2** inhibitor extracted from patent WO2020086963A1, compound Formula I free base.

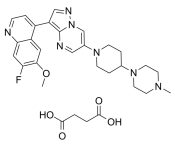


Purity: 99.86%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

ALK2-IN-4 succinate

Cat. No.: HY-136773A

ALK2-IN-4 succinate is a potent **ALK2** inhibitor extracted from patent WO2020086963A1, compound Formula I free base.

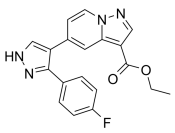


Purity: 99.73%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

ALK5-IN-8

Cat. No.: HY-144043

ALK5-IN-8 is a potent inhibitor of **TGFβRI** (**ALK5**). ALK5-IN-8 Inhibits the phosphorylation of ALK5 on its downstream signaling proteins (Smad2 or Smad3) by blocking the binding of TGFβRI to ligands, thereby affecting or blocking TGF-β signaling.

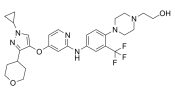


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

ALK5-IN-9

Cat. No.: HY-144437

ALK5-IN-9 (Compound 8h) is a potent and orally active inhibitor of **TGFβRI** (**ALK5**). ALK5-IN-9 inhibits ALK5 autophosphorylation and NIH3T3 cell activity with IC_{50} values of 25 nM and 74.6 nM, respectively.

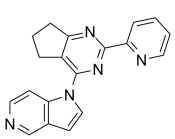


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

AZ12601011

Cat. No.: HY-122856

AZ12601011 is an orally active, selective **TGFBR1 kinase** inhibitor with an IC_{50} of 18 nM and a K_d of 2.9 nM. AZ12601011 inhibits phosphorylation of SMAD2 via selectively inhibiting **ALK4**, **TGFBR1**, and **ALK7**. AZ12601011 inhibits mammary tumor growth .

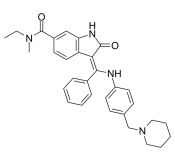


Purity: 99.25%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

BIBF0775

Cat. No.: HY-13783

BIBF0775 is a potent and selective **transforming growth factor β (TGFβ) type I receptor (Alk5)** inhibitor with an IC_{50} of 34 nM.

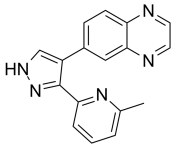


Purity: 99.90%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

BIO-013077-01

Cat. No.: HY-118810

BIO-013077-01 is a pyrazole **TGF-β** inhibitor.

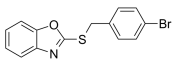


Purity: 98.16%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg, 50 mg

BMP signaling agonist sb4

Cat. No.: HY-124697

BMP signaling agonist sb4 is a potent benzoxazole **bone morphogenetic protein 4 (BMP4) signaling** agonist with a EC_{50} value of 74 nM, activates BMP signaling by stabilizing intracellular p-SMAD-1/5/9.

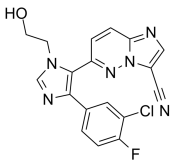


Purity: 99.89%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg

BMS-986260

Cat. No.: HY-W107024

BMS-986260, an immuno-oncology agent, is a potent, selective, and orally active **TGFβR1** inhibitor (IC_{50}=1.6 nM). BMS-986260 displays exquisite selectivity for TGFβR1 over its isozyme TGFβR2, as well as in a panel of more than 200 kinases examined.

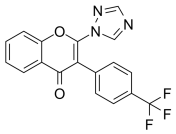


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Chromenone 1

Cat. No.: HY-143891

Chromenone 1 is a potent osteogenic bone morphogenetic protein **(BMP)** potentiator. Chromenone 1 exhibits a unique mode of action as it induces a pronounced, kinase-independent, negative TGFβ feedback that enhances nuclear BMP-Smad signaling outputs.

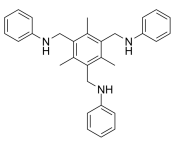


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

CJJ300

Cat. No.: HY-146693

CJJ300 is a transforming growth factor-β (**TGF-β**) inhibitor with an IC_{50} of 5.3 μM. CJJ300 inhibits TGF-β signaling by disrupting the formation of the TGF-β-TβR-I-TβR-II signaling complex.

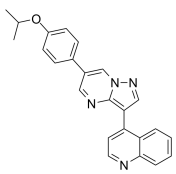


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

DMH-1

Cat. No.: HY-12273

DMH-1 is a potent and selective **BMP** inhibitor with IC_{50}s of 27/107.9/<5/47.6 nM for ALK1/ALK2/ALK3/ALK6, respectively.



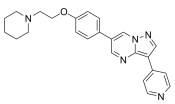
Purity: 99.81%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg

Dorsomorphin

(Compound C; BML-275)

Cat. No.: HY-13418A

Dorsomorphin (Compound C) is a selective and ATP-competitive **AMPK** inhibitor (K_i=109 nM in the absence of AMP). Dorsomorphin (BML-275) selectively inhibits BMP type I receptors **ALK2**, **ALK3**, and **ALK6**. Dorsomorphin induces **autophagy**.



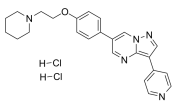
Purity: 99.91%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

Dorsomorphin dihydrochloride

(Compound C dihydrochloride; BML-275 dihydrochloride)

Cat. No.: HY-13418

Dorsomorphin dihydrochloride (BML-275 dihydrochloride; Compound C dihydrochloride) is a potent, selective and ATP-competitive **AMPK** inhibitor, with a K_i of 109 nM.

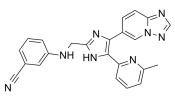


Purity: 99.91%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

EW-7195

Cat. No.: HY-18766

EW-7195 is a potent and selective **ALK5 (TGFβR1)** inhibitor with an IC_{50} of 4.83 nM. EW-7195 has >300-fold selectivity for ALK5 over p38α. EW-7195 efficiently inhibits TGF-β1-induced Smad signaling, epithelial-to-mesenchymal transition (EMT) and breast tumour metastasis to the lung.



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

Fresolimumab

(GC1008)

Cat. No.: HY-P99020

Fresolimumab (GC1008) is a high-affinity fully human monoclonal antibody that neutralizes the active form of human **TGFβ1**, **TGFβ2**, and **TGFβ3**. Fresolimumab can be used for the research of cancer and fibrotic diseases .

Fresolimumab

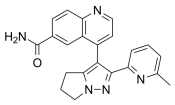
Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Galunisertib

(LY2157299)

Cat. No.: HY-13226

Galunisertib (LY2157299) is an oral and selective **TGF-β receptor type I (TGF-βRI) kinase** inhibitor with an IC_{50} of 56 nM.

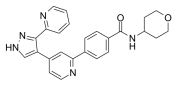


Purity: 99.95%
Clinical Data: Phase 3
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

GW788388

Cat. No.: HY-10326

GW788388 is a potent and selective inhibitor of **ALK5** with IC_{50} of 18 nM, and also inhibits TGF-β type II receptor and activin type II receptor activities, without inhibiting BMP type II receptor.

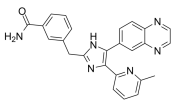


Purity: 99.91%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

IN-1130

Cat. No.: HY-18758

IN-1130 is a highly selective **transforming growth factor-β type I receptor kinase (ALK5)** inhibitor with an IC_{50} of 5.3 nM for ALK5-mediated Smad3 phosphorylation.

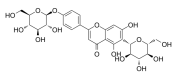


Purity: 99.79%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

Isosaponarin

Cat. No.: HY-N2589

Isosaponarin is a flavone glycoside isolated from wasabi leaves. Isosaponarin increases **collagen synthesis**, caused by up-regulated **TGF-β type II receptor (TβR-II)** and **prolyl 4-hydroxylase (P4H)** proteins production.

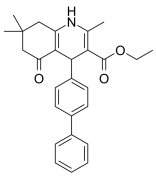


Purity: 99.59%
Clinical Data: No Development Reported
Size: 5 mg

ITD-1

Cat. No.: HY-12704

ITD-1 is the first selective **TGFβ receptor** inhibitor with an IC_{50} of 460 nM.

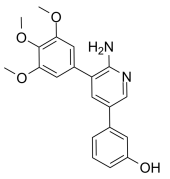


Purity: 99.96%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

K02288

Cat. No.: HY-12278

K02288 is a potent **bone morphogenetic protein (BMP) type I receptor** inhibitor with IC_{50}s of 1.8, 1.1, 6.4 nM for ALK1, ALK2 and ALK6, respectively. K02288 shows slightly weaker inhibition against ALK3 and ALK6 with IC_{50}s of of 5-34 nM.

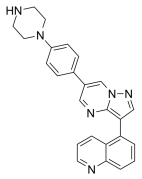


Purity: 99.80%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 10 mg, 50 mg

LDN-212854

Cat. No.: HY-15897

LDN-212854 is a novel BMP inhibitor that exhibits substantially greater selectivity for BMP versus the TGF-β type I receptors; possesses a bias towards ALK2(IC50=1.3 nM) versus ALK1 and ALK3 compared to other inhibitors.

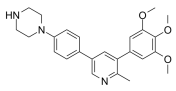


Purity: 99.87%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg

LDN-214117

Cat. No.: HY-16712

LDN-214117 is a potent and selective ALK2 inhibitor with IC50 of 22 nM; > 100 fold selectivity for ALK5; also inhibits BMP6(IC50=100 nM).



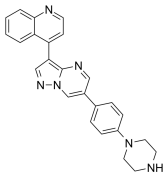
Purity: 99.95%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

LDN193189

(DM-3189)

Cat. No.: HY-12071

LDN193189 (DM-3189) is a selective BMP type I receptor inhibitor, which efficiently inhibits **ALK2** and **ALK3** (IC_{50}=5 nM and 30 nM, respectively), with weaker effects on ALK4, ALK5 and ALK7 (IC_{50}≥500 nM).

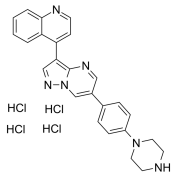


Purity: 99.48%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 50 mg

LDN193189 Tetrahydrochloride

Cat. No.: HY-12071A

LDN193189 Tetrahydrochloride is a selective BMP type I receptor inhibitor, which efficiently inhibits **ALK2** and **ALK3** (IC_{50}=5 nM and 30 nM, respectively), with weaker effects on ALK4, ALK5 and ALK7 (IC_{50}≥500 nM).

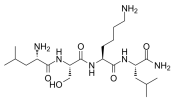


Purity: 98.04%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg

LSKL, Inhibitor of Thrombospondin (TSP-1)

Cat. No.: HY-P0299

LSKL, Inhibitor of Thrombospondin (TSP-1) is a latency-associated protein (LAP)-TGFβ derived tetrapeptide and a competitive **TGF-β1** antagonist. LSKL, Inhibitor of Thrombospondin (TSP-1) inhibits the binding of **TSP-1** to LAP and alleviates renal interstitial fibrosis and hepatic fibrosis.

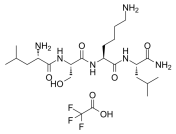


Purity: >98%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg

LSKL, Inhibitor of Thrombospondin (TSP-1) (TFA)

Cat. No.: HY-P0299A

LSKL, Inhibitor of Thrombospondin (TSP-1) TFA is a latency-associated protein (LAP)-TGFβ derived tetrapeptide and a competitive **TGF-β1** antagonist.



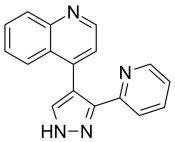
Purity: 99.30%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg

LY-364947

(HTS466284)

Cat. No.: HY-13462

LY-364947 (HTS466284) is a potent ATP-competitive inhibitor of **TGFβR-I** with IC_{50} of 59 nM, and exhibits 7-fold selectivity over TGFβR-II.

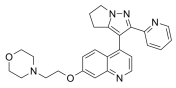


Purity: 98.86%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg

LY2109761

Cat. No.: HY-12075

LY2109761 is an orally active, selective **TGF-β receptor type I/II** inhibitor with K_is of 38 nM and 300 nM, respectively.

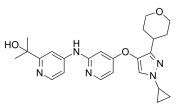


Purity: 99.88%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg

LY3200882

Cat. No.: HY-103021

LY3200882 is a potent, highly selective, ATP-competitive and orally active **TGF-β receptor type 1 (ALK5)** inhibitor with an IC_{50} of 38.2 nM. LY3200882 inhibits various pro-tumorigenic activities and is also used as an immune modulatory agent.

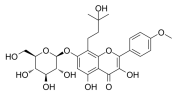


Purity: 99.60%
Clinical Data: Phase 2
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

Maohuoside A

Cat. No.: HY-N4019

Maohuoside A, a single compound isolated from the E. koreanum that potently promotes osteogenesis. Maohuoside A enhances the osteogenesis of bone marrow-derived mesenchymal stem cells via bone morphogenetic protein (BMP) and MAPK signaling pathways.



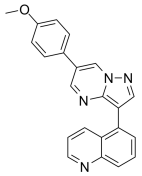
Purity: 98.94%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

ML347

(LDN 193719)

Cat. No.: HY-12274

ML347(DN193719) is a highly selective ALK1/ALK2 inhibitor with IC50s of 46/32 nM; shows >300-fold selectivity for ALK2 vs. ALK3.

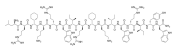


Purity: 99.89%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

Myostatin-IN-1

Cat. No.: HY-P99005

Myostatin-IN-1 is a potent **myostatin** inhibitor (IC_{50} of 0.19, 0.63, 0.89 and 1.6 μM for myostatin, GDF-11, activin A and TGF-β1, respectively). Myostatin-IN-1 increases the tibialis anterior muscle mass in mice.

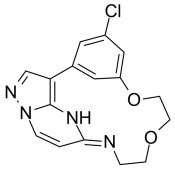


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

OD36

Cat. No.: HY-19628

OD36 is a **RIPK2** inhibitor with an IC_{50} of 5.3 nM. OD36 is a macrocyclic inhibitor with potent binding to the **ALK2** kinase ATP pocket. OD36 shows **ALK2**-directed activity with K_Ds of 37 nM.

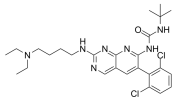


Purity: >98%
Clinical Data: No Development Reported
Size: 5 mg

PD-161570

Cat. No.: HY-100434

PD-161570 is a potent and ATP-competitive **human FGF-1 receptor** inhibitor with an IC_{50} of 39.9 nM and a K_i of 42 nM. PD-161570 also inhibits the **PDGFR**, **EGFR** and **c-Src tyrosine kinases** with IC_{50} values of 310 nM, 240 nM, and 44 nM, respectively.



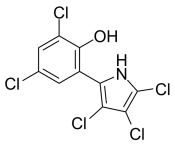
Purity: 99.04%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg

Pentachloropseudilin

(Antibiotic A 15104 Y; PClP)

Cat. No.: HY-115669

Pentachloropseudilin (Antibiotic A 15104 Y; PClP) is a reversible and allosteric potent inhibitor of **Myo1s** (class 1 myosins) with IC_{50}s range from 1 to 5 μM for mammalian class-1 myosins and greater than 90 μM for class-2 and class-5 myosins.

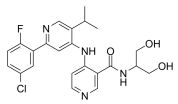


Purity: ≥98.0%
Clinical Data: No Development Reported
Size: 5 mg

PF-06952229

Cat. No.: HY-136244

PF-06952229 is a potent, selective and orally active **TGFbR1** inhibitor. PF-06952229 specifically binds to TGFbR1 and prevents TGFbR1-mediated signal transduction.



Purity: 99.70%
Clinical Data: Phase 1
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

pm26TGF-β1 peptide

Cat. No.: HY-P2294

pm26TGF-β1 peptide is a peptide that mimics a portion of the human TGF-β1 molecule. pm26TGF-β1 peptide shows high affinity for the **TGF-β1 receptor**. pm26TGF-β1 peptide displays potent anti-inflammatory properties and does not exhibit neutrophils' chemoattraction.

ACESPLKRQCGGGS

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

pm26TGF-β1 peptide TFA

Cat. No.: HY-P2294A

pm26TGF-β1 TFA peptide is a peptide that mimics a portion of the human TGF-β1 molecule. pm26TGF-β1 peptide TFA shows high affinity for the **TGF-β1 receptor**. pm26TGF-β1 peptide TFA displays potent anti-inflammatory properties and does not exhibit neutrophils' chemoattraction.

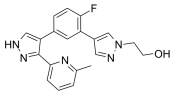
ACESPLKRQCGGGS (TFA salt)

Purity: 99.68%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 50 mg

R-268712

Cat. No.: HY-12953

R-268712 is a potent and selective inhibitor of ALK5 with an IC50 of 2.5 nM.



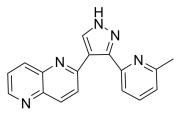
Purity: 99.78%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

RepSox

(E-616452; SJN 2511)

Cat. No.: HY-13012

RepSox (E-616452) is a potent and selective of the **TGFβR-1/ALK5** inhibitor which inhibits ALK5 autophosphorylation with an IC_{50} of 4 nM.

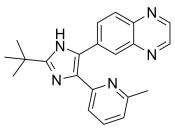


Purity: 99.64%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

SB 525334

Cat. No.: HY-12043

SB 525334 is a potent and selective transforming growth factor β1 receptor **(ALK5)** inhibitor with an IC_{50} of 14.3 nM.

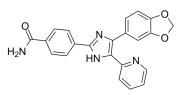


Purity: 99.96%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

SB-431542

Cat. No.: HY-10431

SB-431542 is a potent and selective inhibitor of **ALK5/TGF-β type I Receptor** with an IC_{50} value of 94 nM.

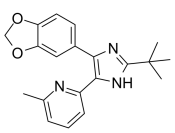


Purity: 99.89%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg

SB-505124

Cat. No.: HY-13521

SB-505124 is a selective inhibitor of **TGF-β Receptor type I receptors** (**ALK4**, **ALK5**, **ALK7**), with IC_{50}s of 129 nM and 47 nM for ALK4, ALK5, respectively, but it does not inhibit ALK1, 2, 3, or 6.

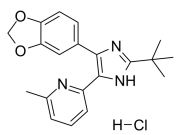


Purity: 99.63%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 10 mg, 50 mg

SB-505124 hydrochloride

Cat. No.: HY-13521A

SB-505124 hydrochloride is a selective inhibitor of **TGF-β Receptor type I receptor** (**ALK4**, **ALK5**, **ALK7**), with IC_{50}s of 129 nM and 47 nM for ALK4, ALK5, respectively, but it does not inhibit ALK1, 2, 3, or 6.

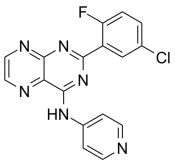


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

SD-208

Cat. No.: HY-13227

SD-208 is a selective **TGF-βRI (ALK5)** inhibitor with IC_{50} of 48 nM, and > 100-fold selectivity over TGF-βRII.

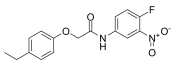


Purity: 99.87%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 10 mg, 50 mg

SJ000291942

Cat. No.: HY-112331

SJ000291942 is an activator of the canonical bone morphogenetic proteins (**BMP**) signaling pathway. BMPs are members of the transforming growth factor beta (**TGFβ**) family of secreted signaling molecules.

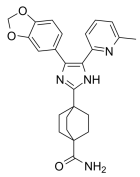


Purity: 98.41%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

SM 16

Cat. No.: HY-111482

SM 16 is a **ALK5/ALK4** kinase inhibitor with K_is of 10 and 1.5 nM, respectively.

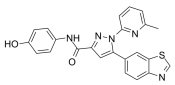


Purity: 99.88%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

TGFBR1-IN-1

Cat. No.: HY-129171

TGFBR1-IN-1 is an **ALK5** inhibitor extracted from patent WO2018004290A1, Compound 33, has an IC_{50} of 10-100 nM.

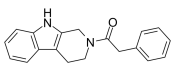


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

TGFβ-IN-1

Cat. No.: HY-142967

TGFβ-IN-1 is an antitumor growth and metastasis agent through inhibiting the **transforming growth factorβ** signaling pathway.

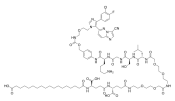


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

TGFβR-IN-1

Cat. No.: HY-139858

TGFβR-IN-1 is a long-acting tumor-activated prodrug of a **TGFβR** inhibitor.

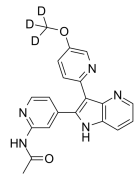


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

TGFβRI-IN-1

Cat. No.: HY-114192

TGFβRI-IN-1 is an oral active and selective **TGFβ receptor type I (TGFβRI)** kinase inhibitor, with IC_{50} values of 2 nM and 7.6 μM for TGFβRI and TGFβRII, respectively .

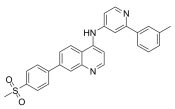


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

TGFβRI-IN-3

Cat. No.: HY-132290

TGFβRI-IN-3 inhibits **TGFβR1** at an IC_{50} of 0.79 nM with 2000-fold selectivity against MAP4K4. TGFβRI-IN-3 represents a highly selective TGFβR1 inhibitor that has potential applications in immuno-oncology.

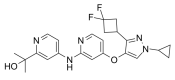


Purity: 98.04%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

TGFβRI-IN-4

Cat. No.: HY-146780

TGFβRI-IN-4 is a highly potent and orally active **TGFβ receptor type I (TGFβRI)** inhibitor, with IC_{50}s of 44 nM and 42.5 nM for ALK5 and NIH3T3. TGFβRI-IN-4 can suppress tumor growth and tumor weight in tumor xenograft model.

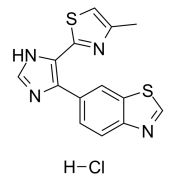


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

TP0427736 hydrochloride

Cat. No.: HY-118528A

TP0427736 hydrochloride is a potent inhibitor of **ALK5** kinase activity with an IC_{50} of 2.72 nM and this effect is 300-fold higher than the inhibitory effect on ALK3 (IC_{50}=836 nM).

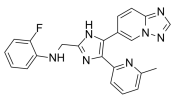


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Vactosertib

(EW-7197; TEW-7197) **Cat. No.:** HY-19928

Vactosertib (EW-7197) is a potent, orally active and ATP-competitive **activin receptor-like kinase 5 (ALK5)** inhibitor with an IC_{50} of 12.9 nM. Vactosertib also inhibits ALK2 and ALK4 (IC_{50} of 17.3 nM) at nanomolar concentrations.

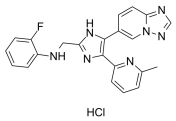


Purity: 99.58%
Clinical Data: Phase 2
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

Vactosertib Hydrochloride

(EW-7197 Hydrochloride; TEW-7197 Hydrochloride) **Cat. No.:** HY-19928A

Vactosertib Hydrochloride (EW-7197 Hydrochloride) is a potent, orally active and ATP-competitive **activin receptor-like kinase 5 (ALK5)** inhibitor with an IC_{50} of 12.9 nM. Vactosertib Hydrochloride also inhibits ALK2 and ALK4 (IC_{50} of 17.3 nM) at nanomolar concentrations.

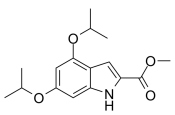


Purity: 98.02%
Clinical Data: Phase 2
Size: 10 mM × 1 mL, 2 mg, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

XST-14

Cat. No.: HY-137506

XST-14 is a potent, competitive and highly selective **ULK1** inhibitor with an IC_{50} of 26.6 nM. XST-14 induces **autophagy** inhibition by reducing the phosphorylation of the ULK1 downstream substrate.



Purity: 99.69%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg