ALK

Anaplastic lymphoma kinase; ALK tyrosine kinase receptor; CD246; Cluster of differentiation 246

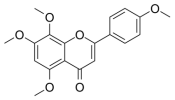
ALK (Anaplastic lymphoma kinase) is encoded by the ALK gene. ALK is a membrane associated tyrosine kinase receptor of the insulin receptor superfamily. The function of the full-length ALK receptor is poorly understood. It has a probable role in the central and peripheral nervous system development and maintenance. ALK is a dependence receptor, which may exert antagonist functions, proapoptotic or antiapoptotic, depending on the absence or presence of a ligand. Dependence receptors have a potential role in cancer and development. Ligands available for this demonstration were agonist anti-ALK antibodies. ALK is still an orphan receptor, given the high level of controversy about pleiotrophin and midkine.

ALK Inhibitors

6-Demethoxytangeretin

Cat. No.: HY-N4126

6-Demethoxytangeretin is a citrus flavonoid isolated from Citrus depressa.

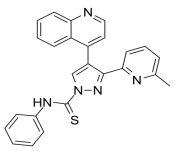


Purity: 99.28%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg

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.

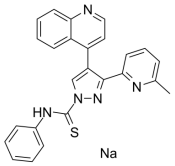


Purity: >98.0%
Clinical Data: No Development Reported
Size: 10 mg, 50 mg

A 83-01 sodium salt

Cat. No.: HY-10432A

A 83-01 sodium salt 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.



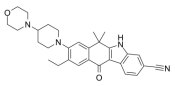
Purity: >95.0%
Clinical Data: No Development Reported
Size: 10 mg, 50 mg

Alectinib

(CH5424802; RO5424802; AF802)

Cat. No.: HY-13011

Alectinib (CH5424802) is a potent, selective, and orally available **ALK** inhibitor with an IC_{50} of 1.9 nM and a K_d value of 2.4 nM (in an ATP-competitive manner), and also inhibits **ALK F1174L** and **ALK R1275Q** with IC_{50}s of 1 nM and 3.5 nM, respectively.

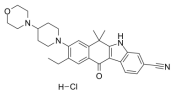


Purity: 99.87%
Clinical Data: Launched
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg

Alectinib Hydrochloride (CH5424802 Hydrochloride; RO5424802 Hydrochloride; AF-802 Hydrochloride)

Cat. No.: HY-13011A

Alectinib Hydrochloride (CH5424802 Hydrochloride; RO5424802 Hydrochloride; AF-802 Hydrochloride) is a potent, selective, and orally available **ALK** inhibitor with an IC_{50} of 1.9 nM and a K_d value of 2.4 nM (in an ATP-competitive manner), and also inhibits **ALK F1174L** and **ALK R1275Q** with...

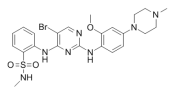


Purity: 99.89%
Clinical Data: Launched
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg

ALK inhibitor 1

Cat. No.: HY-15357

ALK inhibitor 1 (compound 17) is a potent pyrimidin **ALK** inhibitor. ALK inhibitor 1 is a potent inhibitor of **testis-specific serine/threonine kinase 2** (**TSSK2**; IC_{50}=31 nM) and **focal adhesion kinase** (**FAK**; IC_{50}=2 nM).

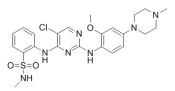


Purity: 99.71%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg

ALK inhibitor 2

Cat. No.: HY-15358

ALK inhibitor 2 (compound 18) is a potent pyrimidin **ALK** inhibitor. ALK inhibitor 2 is a potent inhibitor of **testis-specific serine/threonine kinase 2** (**TSSK2**; IC_{50}=37 nM) and **focal adhesion kinase** (**FAK**; IC_{50}=5 nM).



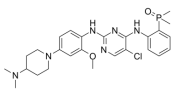
Purity: 99.77%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg

ALK-IN-1

(Brigatinib analog)

Cat. No.: HY-13464

ALK-IN-1 (Brigatinib analog) is a potent and selective active inhibitor of **anaplastic lymphoma kinase(ALK)**, Patent US20140066406 A1.

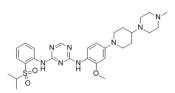


Purity: 99.96%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

ASP3026

Cat. No.: HY-13326

ASP3026 is a potent, selective and orally active inhibitor of **anaplastic lymphoma kinase (ALK)**. ASP3026 induces apoptosis of tumor cells. ASP3026 can be used for the research of non-small cell lung cancer (NSCLC).



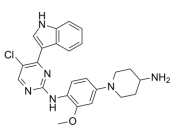
Purity: 99.90%
Clinical Data: Phase 1
Size: 10 mM × 1 mL, 50 mg, 100 mg

AZD-3463

(ALK/IGF1R inhibitor)

Cat. No.: HY-15609

AZD-3463 (ALK/IGF1R inhibitor) is an orally bioavailable **ALK/IGF1R** inhibitor, with a K_i of 0.75 nM for ALK. AZD3463 induces **apoptosis** and **autophagy** in neuroblastoma cells.

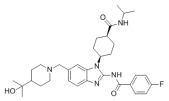


Purity: 99.96%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

Belizatinib

(TSR-011) Cat. No.: HY-17603

Belizatinib is an oral, dual, potent inhibitor of ALK and TRKA, TRKB, and TRKC, with IC_{50} of 0.7nM for wild-type recombinant ALK kinase.

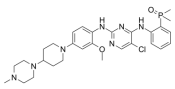


Purity: 99.66%
Clinical Data: Phase 2
Size: 10 mM × 1 mL, 2 mg, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

Brigatinib

(AP-26113) Cat. No.: HY-12857

Brigatinib (AP-26113) is a highly potent and selective **ALK** inhibitor, with an IC_{50} of 0.6 nM.

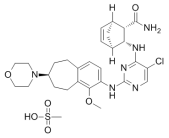


Purity: 99.98%
Clinical Data: Launched
Size: 5 mg, 10 mg, 50 mg, 100 mg

CEP-28122 mesylate salt

Cat. No.: HY-18030A

CEP-28122 mesylate salt is a highly potent and selective orally active ALK inhibitor with IC50 of 1.9 ± 0.5 nM in an enzyme-based TRF assay.

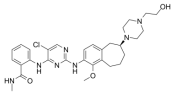


Purity: 99.85%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

CEP-37440

Cat. No.: HY-15841

CEP-37440 is a novel potent and selective Dual FAK/ALK inhibitor with IC50 s of 2.3 nM (FAK) and 120 nM(ALK cellular IC50 in 75% human plasma).

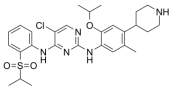


Purity: 99.97%
Clinical Data: Phase 1
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

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.

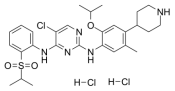


Purity: 99.97%
Clinical Data: Launched
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg, 200 mg

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.

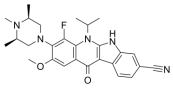


Purity: 99.83%
Clinical Data: Launched
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

CJ-2360

Cat. No.: HY-131909

CJ-2360 is a potent and orally active **ALK** inhibitor with IC_{50}s of 2.2, 4.0, 8.8, 6.3, and 8.9 nM against wild-type ALK and F1197M, G1269A, L1196M, and S1206Y ALK mutants, respectively.

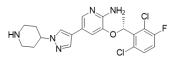


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

Crizotinib

(PF-02341066) Cat. No.: HY-50878

Crizotinib (PF-02341066) is an orally bioavailable, ATP-competitive **ALK** and **c-Met** inhibitor with IC_{50}s of 20 and 8 nM, respectively.

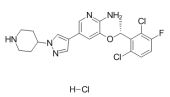


Purity: 99.97%
Clinical Data: Launched
Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg, 200 mg, 500 mg

Crizotinib hydrochloride

(PF-02341066 hydrochloride) Cat. No.: HY-50878A

Crizotinib hydrochloride (PF-02341066 hydrochloride) is an orally bioavailable, selective, and ATP-competitive dual **ALK** and **c-Met** inhibitor with IC_{50}s of 20 and 8 nM, respectively.

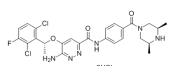


Purity: 99.86%
Clinical Data: Launched
Size: 10 mM × 1 mL, 10 mg, 50 mg, 100 mg, 200 mg, 500 mg

Ensartinib hydrochloride

(X-396 hydrochloride) Cat. No.: HY-103714A

Ensartinib hydrochloride (X-396 hydrochloride) is a potent and dual **ALK/MET** inhibitor with IC_{50}s of <0.4 nM and 0.74 nM, respectively.



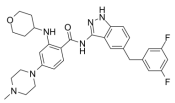
Purity: 99.26%
Clinical Data: No Development Reported
Size: 2 mg, 5 mg, 10 mg

Entrectinib

(NMS-E628; RXDX-101)

Cat. No.: HY-12678

Entrectinib (NMS-E628) is a potent, orally available, and CNS-active **pan-Trk**, **ROS1**, and **ALK** inhibitor. Entrectinib inhibits TrkA, TrkB, TrkC, ROS1 and ALK with IC_{50} values of 1, 3, 5, 12 and 7 nM, respectively. Antitumor activity.

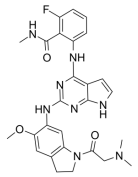


Purity: 99.32%
Clinical Data: Launched
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

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.

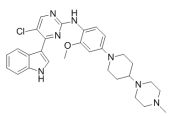


Purity: 99.28%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

HG-14-10-04

Cat. No.: HY-15801

HG-14-10-04 (example 10) **ALK** IC_{50} 20 nM.

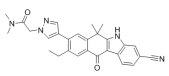


Purity: 98.83%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

JH-VIII-157-02

Cat. No.: HY-112140

JH-VIII-157-02 is a structural analogue of alectinib, acts as an **ALK** inhibitor, and shows an IC_{50} of 2 nM for echinoderm microtubule-associated protein-like 4-ALK (EML4-ALK) G1202R in cells.



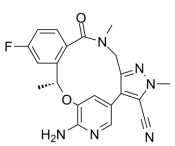
Purity: 98.86%
Clinical Data: No Development Reported
Size: 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

Lorlatinib

(PF-06463922)

Cat. No.: HY-12215

Lorlatinib (PF-06463922) is a selective, orally active, brain-penetrant and ATP-competitive **ROS1/ALK** inhibitor. Lorlatinib has K_is of <0.025 nM, <0.07 nM, and 0.7 nM for ROS1, wild type ALK, and ALK^{L1196M}, respectively. Lorlatinib has anticancer activity.

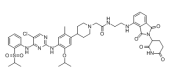


Purity: 99.83%
Clinical Data: Phase 3
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

MS4078

Cat. No.: HY-112155

MS4078 is an anaplastic lymphoma kinase (**ALK**) **PROTAC** (degrader) with a K_d of 19 nM for binding affinity to ALK.



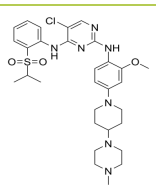
Purity: 98.07%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

NVP-TAE 684

(TAE 684)

Cat. No.: HY-10192

NVP-TAE 684 (TAE 684) is a highly potent and selective **ALK** inhibitor, which blocks the growth of ALCL-derived and ALK-dependent cell lines with IC_{50} values between 2 and 10 nM.



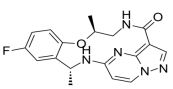
Purity: 99.42%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

Repotrectinib

(TPX-0005)

Cat. No.: HY-103022

Repotrectinib (TPX-0005) is a potent **ROS1** (IC_{50}=0.07 nM) and **TRK** (IC_{50}=0.83/0.05/0.1 nM for TRKA/B/C) inhibitor. Repotrectinib potently inhibits WT **ALK** (IC_{50}=1.01 nM). Repotrectinib has anti-cancer activity.

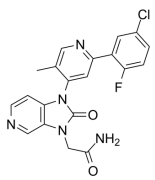


Purity: 99.81%
Clinical Data: Phase 2
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg

TGFβRI-IN-2

Cat. No.: HY-125851

TGFβRI-IN-2 (compound 18) is a potent, selective and orally active **(Activin-Like Kinase 5) ALK 5** inhibitor with pIC_{50} and pEC_{50} values of 7.6 and 6.63, respectively. TGFβRI-IN-2 can produce observed cardiac toxicity in vivo at high dose.

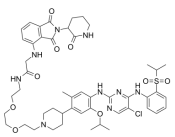


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

TL13-110

Cat. No.: HY-136195

TL13-110 is a negative control for TL13-112 (HY-123919) and a potent ALK inhibitor with an IC_{50} of 0.34 nM. TL13-110 does not degrade **ALK** in cells.

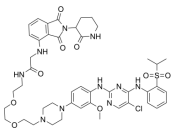


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

TL13-22

Cat. No.: HY-136194

TL13-22 is a negative control for TL13-12 (HY-122582) and a potent **ALK** inhibitor with an IC_{50} of 0.54 nM. TL13-22 does not degrade **ALK** in cells.

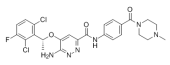


Purity: >98%
Clinical Data: No Development Reported
Size: 1 mg, 5 mg

X-376

Cat. No.: HY-16590

X-376 is a potent and highly specific **ALK** tyrosine kinase inhibitor (TKI) (IC_{50}=0.61 nM). X-376 is a less potent inhibitor of **MET** (IC_{50}=0.69 nM). X-376 displays potent anti-tumor activity.



Purity: 98.36%
Clinical Data: Phase 3
Size: 10 mM × 1 mL, 2 mg, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg