Kinesin

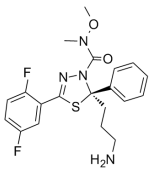
Kinesin is a protein belonging to a class of motor proteins found in eukaryotic cells. Kinesins move along microtubule filaments, and are powered by the hydrolysis of ATP (thus kinesins are ATPases). The active movement of kinesins supports several cellular functions including mitosis, meiosis and transport of cellular cargo. Most kinesins walk towards the plus end of a microtubule, entails transporting cargo from the centre of the cell towards the periphery. Kinesins were discovered as microtubule (MT)-based anterograde intracellular transport motors. The founding member of this superfamily, the genomes of mammals encode more than 40 kinesin proteins, organized into at least 14 families named kinesin-1 through kinesin-14.

Kinesin Inhibitors

(R)-Filanesib
((R)-ARRY-520)

Cat. No.: HY-15187A

(R)-Filanesib ((R)-ARRY-520) is the R-enantiomer of ARRY-520. (R)-Filanesib ((R)-ARRY-520) is a synthetic **kinesin spindle protein (KSP)** inhibitor with IC_{50} of 6 nM.

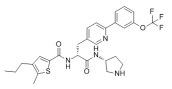


Purity: 98.86%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

AZ82

Cat. No.: HY-12241

AZ82 is a selective **kinesin-like protein KIFC1 (HSET/KIFC1)** inhibitor, with a K_i of 43 nM and an IC_{50} of 300 nM for KIFC1.

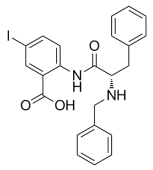


Purity: 99.08%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg

CW-069

Cat. No.: HY-15857

CW-069 is an allosteric inhibitor of **microtubule motor protein HSET** with an IC_{50} of 75 μM.

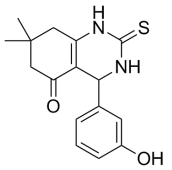


Purity: 99.75%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

Dimethylenastron

Cat. No.: HY-19944

Dimethylenastron is a potent **kinesin Eg5** inhibitor, with an IC_{50} of 200 nM.

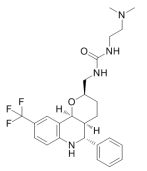


Purity: 98.24%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

EMD534085

Cat. No.: HY-15000

EMD534085 is a potent and selective inhibitor of the mitotic **kinesin-5** with an IC_{50} of 8 nM.

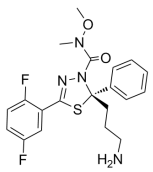


Purity: 99.03%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 1 mg, 5 mg, 10 mg, 25 mg, 50 mg

Filanesib
(ARRY-520)

Cat. No.: HY-15187

Filanesib (ARRY-520) is a selective kinesin spindle protein (**KSP**) inhibitor, with an IC_{50} of 6 nM for human KSP. Filanesib induces cell death by apoptosis in vitro. Filanesib has potent anti-proliferative activity.

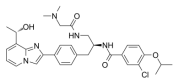


Purity: 99.73%
Clinical Data: Phase 2
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

GSK-923295

Cat. No.: HY-10299

GSK-923295 is a special, allosteric inhibitor of **centromere-associated protein-E (CENP-E)** kinesin motor ATPase activity, with K_i of 3.2±0.2 nM and 1.6± 0.1 nM for human and canine, respectively.

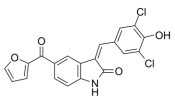


Purity: 99.56%
Clinical Data: Phase 1
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

GW406108X
(GW108X)

Cat. No.: HY-115570

GW406108X is a specific **Kif15 (Kinesin-12)** inhibitor with an IC_{50} of 0.82 uM in ATPase assays. GW406108X, a potent **autophagy** inhibitor, shows ATP competitive inhibition against **ULK1** with a pIC_{50} of 6.37 (427 nM).

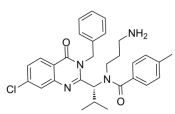


Purity: >98.0%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

Ispinesib
(SB-715992)

Cat. No.: HY-50759

Ispinesib is a specific inhibitor of **kinesin spindle protein (KSP)**, with a $K_{i\ app}$ of 1.7 nM.

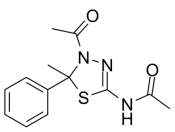


Purity: 99.83%
Clinical Data: Phase 2
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

K858 (Racemic)

Cat. No.: HY-19966

K858 Racemic is an ATP-uncompetitive inhibitor of **kinesin Eg5** with an IC_{50} of 1.3 μM.

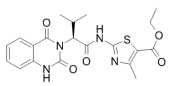


Purity: 99.93%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

Kif15-IN-1

Cat. No.: HY-15948

Kif15-IN-1 is an inhibitor of the mitotic **Kinesin family member 15 (Kif15)**, and is used for the research of cellular proliferative diseases.

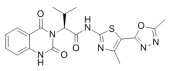


Purity: 99.53%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

Kif15-IN-2

Cat. No.: HY-15949

Kif15-IN-2 is an inhibitor of the mitotic **kinesin Kif15**, and is used for the research of cellular proliferative diseases.



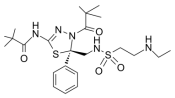
Purity: 98.64%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

Litronesib

(LY2523355)

Cat. No.: HY-14846

Litronesib (LY2523355) is a selective mitosis-specific **kinesin Eg5** inhibitor, with antitumor activity.



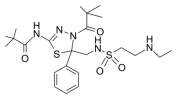
Purity: 99.59%
Clinical Data: Phase 2
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

Litronesib Racemate

(LY2523355 Racemate)

Cat. No.: HY-14846A

Litronesib Racemate (LY2523355 Racemate) is the racemate of litronesib. Litronesib is a selective, allosteric inhibitor of **kinesin Eg5**.



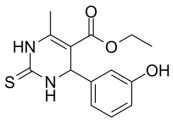
Purity: 99.20%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 2 mg, 5 mg

Monastrol

((±)-Monastrol)

Cat. No.: HY-101071A

Monastrol is a potent and cell-permeable inhibitor of the mitotic **kinesin Eg5** with an IC_{50} value of 14 μM.

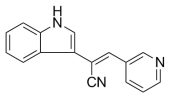


Purity: 99.95%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 1 mg, 5 mg, 10 mg, 25 mg, 50 mg

Paprotrain

Cat. No.: HY-101298

Paprotrain is a cell-permeable inhibitor of the **kinesin MKLP-2**, inhibits the ATPase activity of MKLP-2 with an IC_{50} of 1.35 μM and a K_i of 3.36 μM and shows a moderate inhibition activity on **DYRK1A** with an IC_{50} of 5.5 μM.

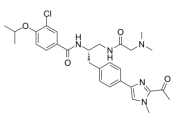


Purity: 99.54%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 25 mg, 50 mg, 100 mg

PF-2771

Cat. No.: HY-19530

PF-2771 is a potent and selective **centromere protein E (CENP-E)** inhibitor, inhibiting CENP-E motor activity with an IC_{50} of 16.1 nM; PF-2771 is used as an anticancer agent.

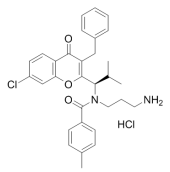


Purity: 99.56%
Clinical Data: No Development Reported
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg

SB-743921

Cat. No.: HY-12069

SB-743921 is a potent inhibitor of the mitotic **kinesin KSP (Eg5)**, with a K_i of 0.1 nM.



Purity: 98.11%
Clinical Data: Phase 2
Size: 10 mM × 1 mL, 5 mg, 10 mg, 50 mg, 100 mg