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Reversine

Catalog No: tcsc1523

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
656820-32-5

Formula:
$C_{21}H_{27}N_7O$

Pathway:
Cell Cycle/DNA Damage;Epigenetics

Target:
Aurora Kinase;Aurora Kinase

Purity / Grade:
>98%

Solubility:
10 mM in DMSO

Observed Molecular Weight:
393.49

Product Description

Reversine is a novel class of ATP-competitive **Aurora kinase** inhibitor with **IC_{50}**s of 400, 500 and 400 nM for **Aurora A**, **Aurora B**

and **Aurora C**, respectively.

IC50 & Target: IC50: 400 nM (Aurora Kinase A), 500 nM (Aurora Kinase B), 400 nM (Aurora Kinase C)[1]

In Vitro: Reversine, a novel Aurora kinases inhibitor, inhibits colony formation of human acute myeloid leukemia cells. Reversine is a potent inhibitor of Aurora A and B and is also an inhibitor of Aurora C kinase. Aurora A and B activities are inhibited by 80% and Aurora kinase C by 55%, already at a concentration of 0.5 μM, whereas no inhibition or only modest inhibition is observed on others kinases tested. In a second round of experiments, the IC_{50} of Reversine is determined on Aurora kinase A to be 400 nM, whereas Aurora kinase B and C IC_{50} are 500 and 400 nM, respectively. The IC_{50} is also determined on MEK1 is >1.5 μM and that the IC_{50} on muscle myosin (an analogue of nonmuscle myosin II) is 350 nM[1].

In Vivo: The combination of Reversine and aspirin can more efficiently induce cell cycle arrest and apoptosis. To evaluate the anti-tumor effect of this combination, a xenograft nude mouse model is established by s.c. injection. Mice inoculated with cervical cancer cells have lost about 10 % of their initial body weight by about 16 days after tumor inoculation. However, tumor growth (tumor weight) is reduced and the mice survive longer in the combination group[2].