

# SCH-1473759

Catalog No: tcsc1341



## Available Sizes

**Size:** 2mg

**Size:** 5mg

**Size:** 10mg

**Size:** 50mg

**Size:** 100mg



## Specifications

**CAS No:**

1094069-99-4

**Formula:**

$C_{20}H_{26}N_8OS$

**Pathway:**

Cell Cycle/DNA Damage;Epigenetics

**Target:**

Aurora Kinase;Aurora Kinase

**Purity / Grade:**

>98%

**Solubility:**

10 mM in DMSO

**Observed Molecular Weight:**

426.54

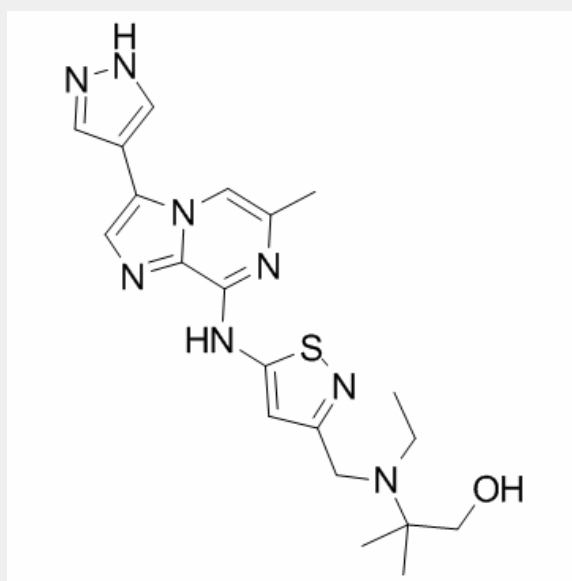
## Product Description

SCH-1473759 is an **aurora** inhibitor with **IC<sub>50</sub>**s of 4 and 13 nM for aurora A and B, respectively.

IC<sub>50</sub> & Target: IC<sub>50</sub>: 4 nM (Aurora A), 13 nM (Aurora B)<sup>[1]</sup>

**In Vitro:** SCH-1473759 directly binds to aurora A and B with K<sub>d</sub>s of 20 and 30 nM, respectively. SCH-1473759 also inhibits the Src family of kinases (IC<sub>50</sub>=13 nM), VEGFR2 (IC<sub>50</sub>=1 nM), and IRAK4 (IC<sub>50</sub>=37 nM). It does not have significant activity (IC<sub>50</sub>>1000 nM) against 34 other kinases representing different families of the kinome. SCH-1473759 inhibits HCT116 cells proliferation with an **IC<sub>50</sub>** of 6 nM<sup>[1]</sup>. SCH 1473759 inhibits tumor cell lines from different tissues (breast, ovarian, prostate, lung, colon, brain, gastric, renal, skin, and leukemia). The most sensitive cell lines include A2780, LNCap, N87, Molt4, K562, and CCRF-CEM with IC<sub>50</sub> values [2].

**In Vivo:** SCH-1473759 at a low dose of 5 mg/kg (ip, bid) is well-tolerated in a continuous dosing schedule and shows 50% tumor growth inhibition (TGI) on day 16. A higher dose of 10mg/kg(ip, bid) is well-tolerated in an intermittent schedule (5 days on, 5 days off) and gave 69% TGI on day 16. SCH-1473759 shows good exposure in all species with the clearance being high in rodents and moderate in dog and monkey. The half-life is also moderate, but the tissue distribution is high<sup>[1]</sup>. SCH 1473759 dose- and schedule-dependent anti-tumor activity in four human tumor xenograft models. Further, the efficacy is enhanced in combination with taxanes and found to be most efficacious when SCH 1473759 is dosed 12-h post-taxane treatment<sup>[2]</sup>.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!