

# SCH900776

**Catalog No: tcsc1117**



## Available Sizes

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**Size:** 5mg

**Size:** 10mg

**Size:** 50mg

**Size:** 100mg



## Specifications

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**CAS No:**

891494-63-6

**Formula:**

$C_{15}H_{18}BrN_7$

**Pathway:**

Cell Cycle/DNA Damage

**Target:**

Checkpoint Kinase (Chk)

**Purity / Grade:**

>98%

**Solubility:**

10 mM in DMSO

**Alternative Names:**

MK-8776

**Observed Molecular Weight:**

376.25

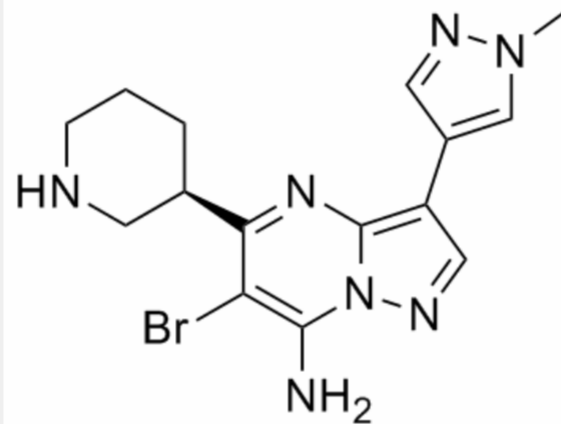
## Product Description

SCH900776 is a potent, selective and orally bioavailable inhibitor of checkpoint kinase1 (**Chk1**) with **IC<sub>50</sub>** of 3 nM, and has much greater selectivity than Chk2 (IC<sub>50</sub>=1500 nM) and cyclin-dependent kinase CDK2 (IC<sub>50</sub>=160 nM).

IC50 & Target: IC50: 3 nM (Chk1), 160 nM (CDK2), 1500 nM (Chk2)<sup>[2]</sup>

**In Vitro:** SCH900776 (300 nM) shows potent inhibitory activities against phosphorylation at ser296-Chk1. SCH900776 (1 μM) causes a 30-fold decrease in the IC<sub>50</sub> for hydroxyurea in MDA-MB-231 cells<sup>[1]</sup>. The K<sub>d</sub> value of SCH 900776 for the CHK1 kinase domain is 2 nM. SCH 900776 exhibits an approximate EC<sub>50</sub> of 60 nM in cells exposure to hydroxyurea. SCH 900776 induces dose-dependent suppression of CHK1 pS296 and concomitant accumulation of phospho-RPA signal in U2OS cells<sup>[2]</sup>.

**In Vivo:** SCH 900776 induces the γ-H2AX biomarker at 4 mg/kg (i.p.), and enhances tumor pharmacodynamic and regression responses in A2780 xenograft model. SCH 900776 (16 and 32 mg/kg, i.p.) induces incremental improvements in tumor response. Escalation of SCH 900776 dose to 20 and 50 mg/kg in combination with gemcitabine results in improvements in TTP 10x in the A2780 xenograft systems<sup>[2]</sup>.



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