

## SB 216763

Catalog No: tcsc0139



### Available Sizes

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Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg



### Specifications

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**CAS No:**

280744-09-4

**Formula:**

$C_{19}H_{12}Cl_2N_2O_2$

**Pathway:**

Stem Cell/Wnt;PI3K/Akt/mTOR;Autophagy

**Target:**

GSK-3;GSK-3;Autophagy

**Purity / Grade:**

>98%

**Solubility:**

H<sub>2</sub>O :

**Observed Molecular Weight:**

371.22

### Product Description

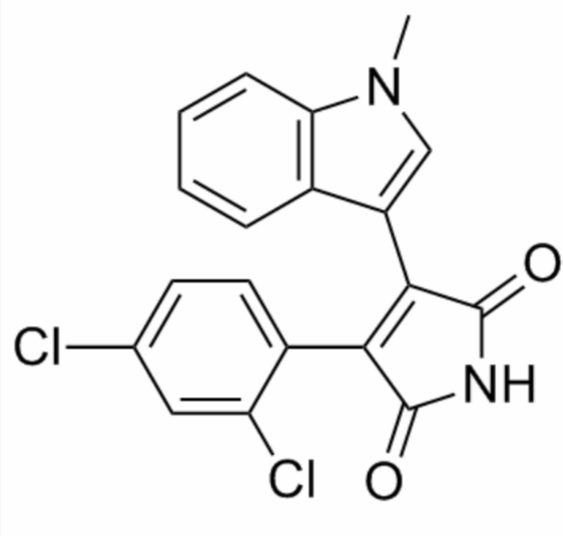
SB 216763 is potent and selective and ATP-competitive **glycogen synthase kinase-3 (GSK-3)** inhibitor, with an **IC<sub>50</sub>** value of 34.3

nM for GSK-3 $\alpha$  and GSK-3 $\beta$ , respectively.

IC50 & Target: IC50: 34.3 nM (GSK-3 $\alpha$ ), 34.3 nM (GSK-3 $\beta$ )<sup>[5]</sup>

**In Vitro:** SB-216763 (10-20  $\mu$ M) induces  $\beta$ -catenin mediated-transcription in a dose-dependent manner in HEK293 cells. SB-216763 (10, 15 and 20  $\mu$ M) can maintain mESCs with a pluripotent-like morphology in long-term culture. SB-216763 (10  $\mu$ M) can maintain J1 mESCs in a pluripotent state for more than a month<sup>[2]</sup>. SB-216763 inhibits GSK-3 with IC<sub>50</sub> of 34 nM<sup>[3]</sup>. SB-216763 is equally effective at inhibiting human GSK-3 $\alpha$  and GSK-3 $\beta$ <sup>[5]</sup>.

**In Vivo:** SB216763 (20 mg/kg, i.v.) significantly improves the survival of BLM-treated mice. Mice randomized to receive BLM plus SB216763 shows a noteworthy reduction, compared with BLM-treated mice. SB216763 (20 mg/kg, i.v.) reduces the magnitude of BLM-induced alveolitis<sup>[1]</sup>. SB 216763 (0.2 mg/kg, i.v.) with either 17 $\beta$ -E<sub>100</sub> or Geni<sub>100</sub> reverses the ceiling effect because these agents significantly reduce infarct size when the rabbits' hearts are submitted to 30-min CAO<sup>[4]</sup>.



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