Web: www.taiclone.com
Tel: +886-2-2735-9682
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SB 216763

Catalog No: tcsc0139

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Specifications

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:
H2O :

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_{50}** value of 34.3

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nM for GSK-3α and GSK-3β, respectively.

IC50 & Target: IC50: 34.3 nM (GSK-3α), 34.3 nM (GSK-3β)[5]

In Vitro: SB-216763 (10-20 μM) induces β-catenin mediated-transcription in a dose-dependent manner in HEK293 cells. SB-216763 (10, 15 and 20 μM) can maintain mESCs with a pluripotent-like morphology in long-term culture. SB-216763 (10 μM) can maintain J1 mESCs in a pluripotent state for more than a month[2]. SB-216763 inhibits GSK-3 with IC_{50} of 34 nM[3]. SB-216763 is equally effective at inhibiting human GSK-3α and GSK-3β[5].

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[1]. SB 216763 (0.2 mg/kg, i.v.) with either 17β-E_{100} or $Geni_{100}$ reverses the ceiling effect because these agents significantly reduce infarct size when the rabbits\' hearts are submitted to 30-min CAO[4].