SB216763 Package: 10mg

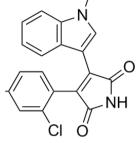
Technical literature is available at: www.mesgenbio.com. E-mail MesGen Technical Services if you have questions on use of this system: tech@mesgenbio.com



CAS: 280744-09-4 Catalog Number: MG29903

Purity ≥98% by HPLC **Appearance :** Off-white to orange(solid)

Molecular weight: 371.22 Molecular formula: C<sub>19</sub>H<sub>12</sub>Cl<sub>2</sub>N<sub>2</sub>O<sub>2</sub>



## Description

A cell-permeable (arylindole) maleimide compound that acts as a potent, selective, ATP-competitive inhibitor of GSK-3 activity  $(K_i = 9.1 \text{ nM for GSK-}3\alpha)$ . At 10  $\mu\text{M}$  concentration, does not significantly inhibit a panel of 24 other protein kinases tested. Reported to stimulate glycogen synthesis in Chang human liver cells (EC<sub>50</sub> = 3.6 µM) and induce transcription of β-catenin-LEF/TCF (lymphoid enhancer factor/T cell factor) regulated reporter gene in HEK293 human embryonic kidney cell lines. Offers protection against polyglutamine-induced death in SK-N-SH and COS-7 cells and attenuates hypoxia-induced apoptosis in VSMC and COS-7 cells. Shown to reduce phosphoenolpyruvate carboxykinase (PEPCK) and glucose-6-phosphatase (G6Pase) expression in hepatoma cells. Promotes the survival of CLL lymphocytes via Wnt/β-catenin-mediated transcription activation. Exhibits delayed cardioprotection in vivo in a rat model via a KATP (ATP-sensitive potassium channels) and MPTP (mitochondrial permeability transition pore)-dependent mechanism at reperfusion.

A cell-permeable (aryl,indole) maleimide compound that acts as a potent, selective, ATP-competitive inhibitor of GSK-3 activity (K<sub>i</sub> = 9.1 nM for GSK-3α). At 10 μM concentration, does not significantly inhibit a panel of 24 other protein kinases tested. Reported to stimulate glycogen synthesis in Chang human liver cells (EC<sub>50</sub> = 3.6 µM) and induce transcription of β-catenin-LEF/TCF (lymphoid enhancer factor/T cell factor) regulated reporter gene in HEK293 human embryonic kidney cell lines. Offers protection against polyglutamine-induced death in SK-N-SH and COS-7 cells and attenuates hypoxia-induced apoptosis in VSMC and COS-7 cells. Shown to reduce phosphoenolpyruvate carboxykinase (PEPCK) and glucose-6-phosphatase (G6Pase) expression in hepatoma cells. Promotes the survival of CLL lymphocytes via Wnt/β-catenin-mediated transcription activation. Exhibits delayed cardioprotection in vivo in a rat model via a KATP (ATP-sensitive potassium channels) and MPTP (mitochondrial permeability transition pore)-dependent mechanism at reperfusion.

## **Solvent & Solubility**

Water <1.2mg/mL Ethanol <1.2mg/mL DMSO ≥25mg/mL

## Storage condition

-20°C

For Research Use Only. Not For Use In Diagnostic Procedures.

Tel: 86-21-56620378 I China (mainland) MesGen Biotechnology

tech@mesgenbio.com www.mesgenbio.com