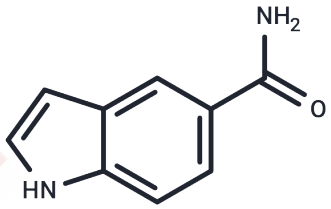
Data Sheet (Cat.No.T7661)

TargetMol

SD-169

Chemical Properties



CAS No. : 1670-87-7

Formula: C9H8N2O

Molecular Weight: 160.17

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	SD-169 (SD 169) is a selective and ATP competitive the MAP kinases p38α and p38β inhibitor.
Targets(IC50)	p38 MAPK
In vivo	Animals were gavaged with Scios SD-169 (10 or 30 mg/kg) or excipient (PEG300) 1 day before and daily after crush injury to the sciatic nerve.?SD-169 is a proprietary oral inhibitor of p38 MAPK activity.?The rate of axonal regeneration was determined by the functional pinch test and was significantly increased in treated animals 8 days after crush injury ($P < 0.05$;?30 mg/kg dose).?In SD-169-treated animals with nerve transection, nerve fibers regenerating through a silicone chamber were morphologically more mature than untreated nerves when observed 28 days after transection.?TNF immunofluorescence of distal nerve segments after crush injury suggested that SD-169 reduced SC TNF protein[1].

Solubility Information

Solubility	DMSO: 10 mg/mL (62.43 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 1 mg/mL (6.24 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	6.2434 mL	31.2168 mL	62.4337 mL
5 mM	1.2487 mL	6.2434 mL	12.4867 mL
10 mM	0.6243 mL	3.1217 mL	6.2434 mL
50 mM	0.1249 mL	0.6243 mL	1.2487 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Myers R R , Sekiguchi Y , Kikuchi S , et al. Inhibition of p38 MAP kinase activity enhances axonal regeneration[J]. Experimental Neurology, 2003, 184(2):0-614.

Klapsing P , Herrmann P , Quintel M , et al. Automatic quantitative computed tomography segmentation and analysis of aerated lung volumes in acute respiratory distress syndrome—A comparative diagnostic study[J]. Journal of Critical Care, 2016, 42:184-191.