CHAMOT

SB 202190

CM006-5SM
CM006-10SM

CHAMOT
乔默生物技术(上海)有限公司
CHAMOT BIOTECHNOLOGY CO., LTD.

CONTENT

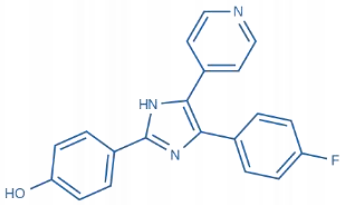
SB 202190

编号: CM006-5SM
CM006-10SM

规格: 5 mg
10 mg

类别: 小分子

产品简介



CAS号: 152121-30-7

分子式: $C_{20}H_{14}FN_3O$

分子量: 331.34

储存	Powder	Inert atmosphere,2-8°C	
	In solvent	-20°C:3-6 月	-80°C:12月
溶解度	DMSO	66.0 mg/mL (199.2 mM)	
	Ethanol	12.0 mg/mL (36.2 mM))	
	Water	Insoluble	
使用配方		5%DMSO+40%PEG300+5%Tween80+50%water	8 mg/mL

产品使用

原液配制

Volume / Mass / Concentration	10 mg	50 mg	1 g
1mM	30.1805 mL	150.902 mL	3018.05 mL
5mM	6.0361 mL	30.180 mL	603.61 mL
10mM	3.0180 mL	15.090 mL	301.80 mL

产品应用数据

Biological Activity

Target	p38 MAPKα	p38 MAPKβ
	IC50:50nM	IC50:100nM
Description	Mitogen-activated protein kinase (MAPK) cascades regulate signal transduction involved in cell proliferation and death. SB-202190 is a potent cell-permeable inhibitor of p38 MAPK that inhibits p38 and p38β with IC50 values of 50 nM and 100 nM, respectively. SB-202190 at 5 μM inhibited the activation of p38 in HaCaT cells. The protein expression of COX-2 was almost completely blocked by 5 μM SB-202190 at 8 and 12 h post the exposure to UVB irradiation (250 J/m). SB-202190 at the same concentration also significantly abrogated UVB induced *cox-2*mRNA in HaCaT cells. The inhibitory effect of SB-202190 on PGE_2 production after UVB was observed in HaCaT cells treated by 5 μM SB-202190 for one hour. Bull serum albumin induced the gene expression of the inflammation marker MCP-1 more than 30-fold in renal tubular cells, while pre-incubation with 10 μM SB-202190 decreased the gene expression to the basal level. In HK-2 cells, 10 μM SB202190 treatment significantly reduced TGF-β1-induced gene expression. Two doses of SB-202190 (6.25 μg/dose, i.d. administered) prevented the development of blisters and a positive Nikolsky' s skin induced by PV IgG injection (1.5 mg of IgG/g body weight) in neonatal mice. The PV IgG-mediated activation of phospho-p38MAPK immunoreactivity in the skin was abrogated in SB-202190-treated mice.	
Mechanism	SB-202190 is a pyridinyl imidazole that inhibits p38 MAPK via competing with ATP.	

Cell Study

Cell Lines	Concentration	Assay Type	Time	Activity Description	Data Sources
A 549	50 μM	Function Assay	1 h	decreases the level of IL-8	24179688
A549	0.3/3/30 μM	Function Assay	1 h	significantly attenuates ATPγS-mediated COX-2 protein and mRNA expression and promoter activity	23680674
A549	10 μM	Function Assay	0-30 min	inhibits ATPγS induced p42/p44 MAPK and p38 MAPK phosphorylation	23680674

Animal Study

Dose	Nude Mice: 5 mg/kg (i.p.), 25 μg/kg (i.p.) Mice: 20 mg/kg (i.p.)
Administration	i.p.