Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

PD 169316

Catalog No: tcsc1711

Available Sizes

Size: 10mg

Size: 50mg

Specifications

CAS No:
152121-53-4

Formula:
$C_{20}H_{13}FN_4O_2$

Pathway:
MAPK/ERK Pathway;Autophagy

Target:
p38 MAPK;Autophagy

Purity / Grade:
>98%

Solubility:
H2O :

Observed Molecular Weight:
360.34

Product Description

PD 169316 is a potent, cell-permeable and selective **p38 MAP kinase** inhibitor, with **IC_{50}** of 89 nM.

IC50 & Target: IC50: 89 nM (p38 MAPK)[5]

In Vitro: PD169316 (10 μM) inhibits TGFβ and Activin A, but not BMP4 signaling in CaOV3 cells. PD169316 (0.2-20 μM) inhibits TGFβ-induced Smad2 nuclear translocation, Smad7 mRNA induction, and reporter gene activity in CaOV3 cells[1]. PD169316 (10 μM)

shows a significantly increased rate of proliferation in Nestin knockdown cells, and can rescue the effect of Nestin knockdown on cell viability in the absence of EGF[2]. PD169316 significantly inhibits p38 MAP kinase activity with no significant change in ERK activity in PC12 cells. PD169316 (10 μM) blocks apoptosis induced by trophic factor withdrawal in differentiated PC12 cells[3].

In Vivo: PD169316 (30 ng/5 μL) or in combination with U0126 improves spatial learning in MWM in Aβ-injected rats, 20 days after Aβ-injection. Pretreatment with U0126 and PD169316 decreases the levels of phosphorylated form of ERK and p38 to about 77.7 and 64.2%, respectively, and causes a significant increase in c-fos, p-CREB, NRF-1 and TFAM protein levels, compared to the Aβ-injected group[4].