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

PF-4708671

Catalog No: tcsc1739

Available Sizes

Size: 10mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
1255517-76-0

Formula:
$C_{19}H_{21}F_3N_6$

Pathway:
MAPK/ERK Pathway

Target:
Ribosomal S6 Kinase (RSK)

Purity / Grade:
>98%

Solubility:
DMSO : 33.33 mg/mL (85.37 mM; Need ultrasonic)

Observed Molecular Weight:
390.41

Product Description

PF-4708671 is a potent cell-permeable **S6K1** inhibitor with a **K_i** of 20 nM and **IC_{50}** of 160 nM.

In Vitro: PF-4708671 inhibits the activity of full-length S6K1 in vitro with a K_i of 20 nM, and S6K1 isolated from IGF1-stimulated

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HEK293 cells with an IC_{50} of 0.16 μM, and only inhibits very weakly the closely related S6K2 isoform (IC_{50} of 65 μM). PF-4708671 inhibits RSK1 (IC_{50} of 4.7 μM) and RSK2 (IC_{50} of 9.2 μM) over 20-fold less potently than S6K1. PF4708671 inhibits MSK1 (IC_{50} of 0.95 μM) 4-fold more weakly than S6K1[1]. HCT116 cells are treated with (i) vehicle (DMSO), (ii) OSI-906 (5 μM), (iii) PF-4708671 (10 μM), and (iv) OSI-906 (5 μM)+PF-4708671 (10 μM) for various amounts of time. HCT116 cells treated with OSI-906 alone (closed square) or PF4708671 alone (open circle) slightly inhibit cell growth. In contrast, proliferation in HCT116 cells is significantly inhibited after a 2-day treatment with the combination of OSI-906 and PF-4708671 (closed circle). A similar result is also observed when SW480 cells are treated with the combination of OSI-906 and PF-4708671. Colony formation also significantly reduces in OSI-906+PF-4708671-treated cells comparing with vehicle, OSI-906 alone, or PF-4708671 alone treated HCT116 or SW480 cells[2].

In Vivo: The tumor growth rate in mice treated with the combination of OSI-906+PF-4708671 is significantly slower than that of OSI-906 alone (P=0.0189) or PF4708671 alone (P=0.0165) treated mice. The average tumor volume in the OSI-906+PF-4708671-treated mice is approximately 50% of that in mice treated with OSI-906 (P=0.0056) or PF-4708671 alone (P[2].