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

PHA-767491

Catalog No: tcsc1208

Available Sizes

Size: 10mg

Size: 50mg

Specifications

CAS No:
845714-00-3

Formula:
$C_{12}H_{11}N_3O$

Pathway:
Cell Cycle/DNA Damage

Target:
CDK

Purity / Grade:
>98%

Solubility:
10 mM in DMSO

Alternative Names:
CAY10572

Observed Molecular Weight:
213.24

Product Description

PHA-767491 is a dual **Cdc7/Cdk9** inhibitor, with **IC_{50}**s of 10 nM and 34 nM, respectively.

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

IC50 & Target: IC50: 10 nM (Cdc7), 34 nM (Cdk9)[1][4], 240 nM (Cdk2), 250 nM (Cdk1), 460 nM (Cdk5), 220 nM (GSK3-β)[4]

In Vitro: PHA-767491 inhibits proliferation in both cell lines with an IC_{50} of 0.64 μM in HCC1954 cells and 1.3 μM in Colo-205 cells. PHA-767491 is effective DDK inhibitors in vitro, with IC_{50} values of 18.6 nM. PHA-767491 (2 μM) completely abolishes Mcm2 phosphorylation by 24 hours in HCC1954 cells[1]. PHA-767491 in combination with 5-FU exhibits much stronger cytotoxicity and induces significant apoptosis manifested by remarkably increased caspase 3 activation and poly(ADP-Ribose) polymerase fragmentation in HCC cells. PHA-767491 directly counteracts the 5-FU-induced phosphorylation of Chk1 and decreases the expression of the anti-apoptotic protein myeloid leukemia cell 1ine[2]. PHA-767491 (0-10 μM) decreases glioblastoma cell viability in a time- and dose-dependent fashion, with IC_{50} of approximately 2.5 μM for U87-MG and U251-MG cells. PHA-767491 hydrochloride induces apoptosis in glioblastoma cells, suppresses glioblastoma cell proliferation, cell migration and cell invasion[3].

In Vivo: PHA-767491 decreases Chk1 phosphorylation and increases in situ cell apoptosis in tumor tissues sectioned from nude mice HCC xenografts[2].