

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

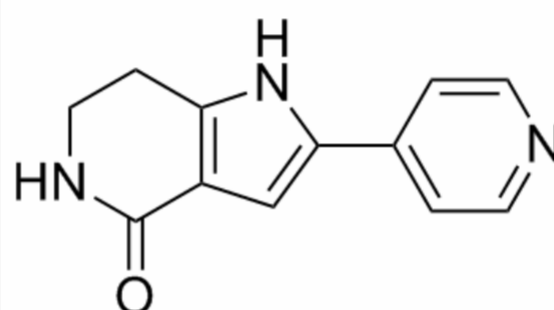
Product Description

PHA-767491 is a dual **Cdc7/Cdk9** inhibitor, with **IC₅₀**s of 10 nM and 34 nM, respectively.

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 IC₅₀ of 0.64 μM in HCC1954 cells and 1.3 μM in Colo-205 cells. PHA-767491 is effective DDK inhibitors in vitro, with IC₅₀ 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 line^[2]. PHA-767491 (0-10 μM) decreases glioblastoma cell viability in a time- and dose-dependent fashion, with IC₅₀ 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].



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