

# 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

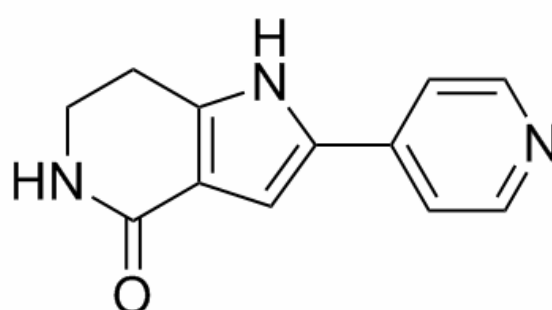
## Product Description

PHA-767491 is a dual **Cdc7/Cdk9** inhibitor, with **IC<sub>50</sub>**s of 10 nM and 34 nM, respectively.

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

**In Vitro:** PHA-767491 inhibits proliferation in both cell lines with an IC<sub>50</sub> 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<sub>50</sub> values of 18.6 nM. PHA-767491 (2 μM) completely abolishes Mcm2 phosphorylation by 24 hours in HCC1954 cells<sup>[1]</sup>. 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<sup>[2]</sup>. PHA-767491 (0-10 μM) decreases glioblastoma cell viability in a time- and dose-dependent fashion, with IC<sub>50</sub> 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<sup>[3]</sup>.

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



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!