



BS-181

Catalog No: tcsc0490



Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg



Specifications

CAS No:

1092443-52-1

Formula:

 $C_{22}H_{32}N_{6}$

Pathway:

Cell Cycle/DNA Damage

Target:

CDK

Purity / Grade:

>98%

Solubility:

10 mM in DMSO

Observed Molecular Weight:

380.53

Product Description

BS-181 is a highly selective **CDK7** inhibitor with IC_{50} of 21 nM, and > 40-fold selective for CDK7 than CDK1, 2, 4, 5, 6, or 9.

IC50 & Target: IC50: 21 nM (CDK7)^[1]

In Vitro:





BS-181 promotes cell cycle arrest and inhibits cancer cell growth, and growth is inhibited for all cell lines tested, with IC $_{50}$ values ranging from 11.5 to 37 μ M. BS-181 inhibits RB phosphorylation at Ser 795 and Ser 821 with an apparent IC $_{50}$ of 15 μ M, similar to the IC $_{50}$ obtained for P-Ser2 inhibition. BS-181 treatment of MCF-7 cells leads to G1 arrest at and apoptosis [1]. BS-181 inhibits GC cell and normal gastric epithelial RGM-1 cell line growth with inhibitory concentration (IC $_{50}$) ranging from 17 to 22 μ M and 6.5 μ M, respectively. BS-181 significantly inhibits cell migration and invasion ability in a dose-dependent manner [2].

In Vivo: BS-181 (5 mg/kg, 10 mg/kg, i.p.) inhibits the growth of MCF-7 tumors in nude mice. Intravenous (i.v) and i.p administration of 10 mg/kg BS-181 shows rapid clearance^[1]. BS-181 (10 mg/kg/d or 20 mg/kg/d, i.p.) significantly inhibits the growth of tumor in a dose-dependent manner compared to the control group^[2].

$$H_2N$$
 N
 N
 N

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