

# 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

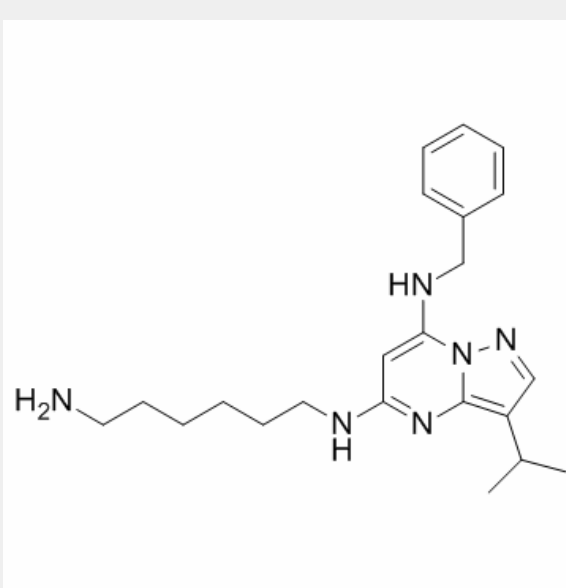
BS-181 is a highly selective **CDK7** inhibitor with **IC<sub>50</sub>** of 21 nM, and > 40-fold selective for CDK7 than CDK1, 2, 4, 5, 6, or 9.

IC50 & Target: IC50: 21 nM (CDK7)<sup>[1]</sup>

***In Vitro:***

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

***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<sup>[1]</sup>. 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<sup>[2]</sup>.



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