

THZ531

Catalog No: tcsc0015451



Available Sizes

Size: 5mg

Size: 10mg

Size: 25mg

Size: 50mg



Specifications

CAS No:

1702809-17-3

Formula:

$C_{30}H_{32}ClN_7O_2$

Pathway:

Cell Cycle/DNA Damage

Target:

CDK

Purity / Grade:

>98%

Solubility:

DMSO : 16 mg/mL (28.67 mM; Need ultrasonic and warming)

Observed Molecular Weight:

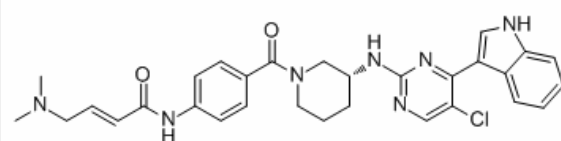
558.07

Product Description

THZ531 is a covalent inhibitor of both **CDK12** and **CDK13** with **IC₅₀**s of 158 nM and 69 nM, respectively.

IC50 & Target: IC50: 158 nM (CDK12), 69 nM (CDK13)

In Vitro: The results from Kinase assays demonstrate that THZ531 potently inhibits CDK12 and CDK13 with IC₅₀s of 158 nM and 69 nM, respectively; whereas inhibition of CDK7 and CDK9 is more than 50-fold weaker with IC₅₀s of 8.5 and 10.5 μM, respectively. THZ531 treatment leads to a dramatic and irreversible decrease in Jurkat cell proliferation with an IC₅₀ of 50 nM. FACS cell cycle analysis following treatment with escalating doses of THZ531 displays a dose and time-dependent increase in the number of cells exhibiting sub-G1 content. At 50 nM THZ531, no increase in the percentage of apoptotic cells is observed over DMSO control for the time course of the experiment. Higher doses of THZ531 leads to pronounced Annexin V signal with 30 to 40% annexin V-positively stained cells by 72 hrs. A dramatic reduction in elongating Pol II following THZ531 treatment is also observed^[1].



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