

# 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:**

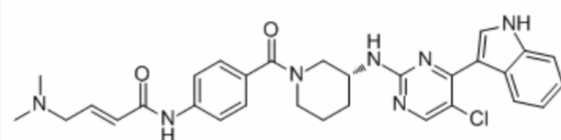
558.07

## Product Description

THZ531 is a covalent inhibitor of both **CDK12** and **CDK13** with **IC<sub>50</sub>**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 IC<sub>50</sub>s of 158 nM and 69 nM, respectively; whereas inhibition of CDK7 and CDK9 is more than 50-fold weaker with IC<sub>50</sub>s of 8.5 and 10.5 μM, respectively. THZ531 treatment leads to a dramatic and irreversible decrease in Jurkat cell proliferation with an IC<sub>50</sub> 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<sup>[1]</sup>.



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