Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

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_{50}**s of 158 nM and 69 nM, respectively.

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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_{50}s of 158 nM and 69 nM, respectively; whereas inhibition of CDK7 and CDK9 is more than 50-fold weaker with IC_{50}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_{50} 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].