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

ZM-447439

Catalog No: tcsc0009

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Specifications

CAS No:
331771-20-1

Formula:
$C_{29}H_{31}N_5O_4$

Pathway:
Cell Cycle/DNA Damage;Epigenetics

Target:
Aurora Kinase;Aurora Kinase

Purity / Grade:
>98%

Solubility:
DMSO : ≥ 100 mg/mL (194.71 mM)

Observed Molecular Weight:
513.59

Product Description

ZM-447439 is an **aurora** kinase inhibitor with **IC_{50}**s of 110 and 130 nM for aurora A and B, respectively.

IC50 & Target: IC50: 110 nM (Aurora A), 130 nM (Aurora B)[1]

In Vitro:

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Cells treated with ZM-447439 progress through interphase, enter mitosis normally, and assemble bipolar spindles. However, chromosome alignment, segregation, and cytokinesis all fail. ZM-447439 inhibits cell division and inhibit mitotic phosphorylation of histone H3. ZM-447439 prevents chromosome alignment and segregation. ZM-447439 compromises spindle checkpoint function. ZM-447439 inhibits kinetochore localization of BubR1, Mad2, and Cenp-E[1]. Inhibition of Aurora kinase by ZM-447439 reduces histone H3 phosphorylation at Ser10 in Hep2 carcinoma cells. Multipolar spindles are induced in these ZM-treated G2/M-arrested cells with accumulation of 4N/8N DNA, similar to cells with genetically suppressed Aurora-B. ZM-447439 treatment induces cell apoptosis. ZM-447439 inhibition of Aurora kinase is potently in association with decrease of Akt phosphorylation at Ser473 and its substrates GSK3α/β phosphorylation at Ser21 and Ser9[2].