

# 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 :  $\geq 100$  mg/mL (194.71 mM)

**Observed Molecular Weight:**

513.59

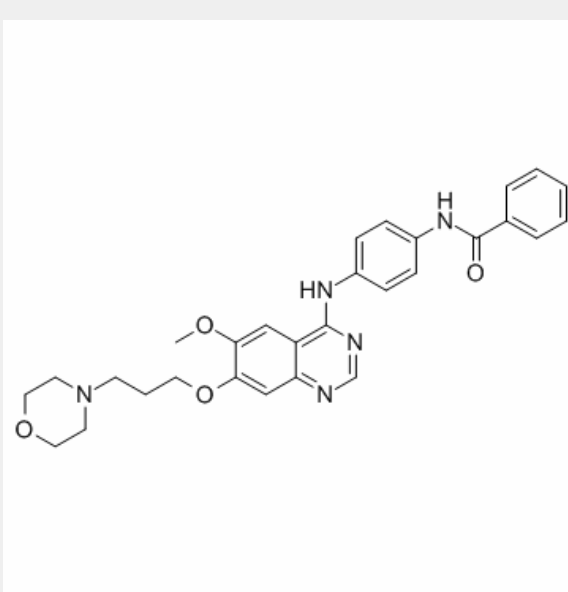
## Product Description

ZM-447439 is an **aurora** kinase inhibitor with **IC<sub>50</sub>**s of 110 and 130 nM for aurora A and B, respectively.

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

***In Vitro:***

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<sup>[1]</sup>. 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 GSK3 $\alpha/\beta$  phosphorylation at Ser21 and Ser9<sup>[2]</sup>.



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