

Ro-3306

Catalog No: tcsc3790



Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg



Specifications

CAS No:

872573-93-8

Formula:

$C_{18}H_{13}N_3OS_2$

Pathway:

Cell Cycle/DNA Damage

Target:

CDK

Purity / Grade:

>98%

Solubility:

DMSO : ≥ 47 mg/mL (133.73 mM)

Observed Molecular Weight:

351.45

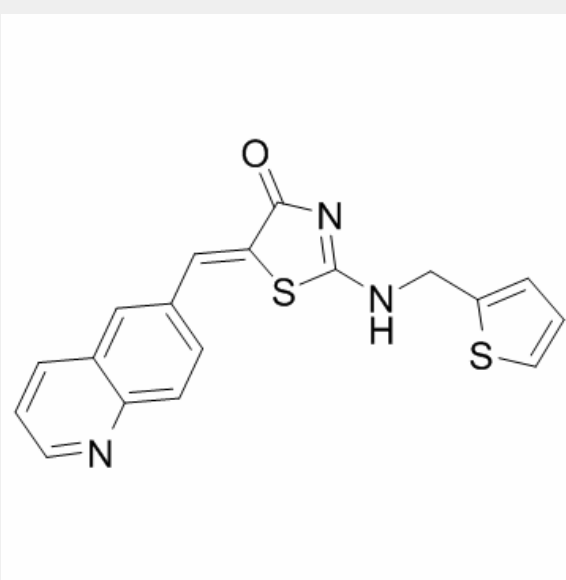
Product Description

Ro-3306 is a potent and selective inhibitor of **CDK1**, with **K_i**s of 20 nM, 35 nM and 340 nM for CDK1, CDK1/cyclin B1 and CDK2/cyclin

E, respectively.

IC50 & Target: Ki: 20 nM (CDK1), 35 nM (CDK1/cyclin B1), 340 nM (CDK2/cyclin E), 318 nM (PKCδ)^[1]

In Vitro: RO-3306 is an ATP-competitive inhibitor, and inhibits CDK1/cyclin A complexes with K_i of 110 nM. RO-3306 blocks the cell cycle in the G2/M phase of human cancer cells. RO-3306 (4 μM) induces apoptosis in cancer cells^[1]. RO-3306 (5 μM) induces G2/M-phase cell cycle arrest and apoptosis of AML cells in a time-dependent manner. RO-3306 treatment significantly increases the percentage of Annexin V-positive cells in G1-phase cells without affecting the cell cycle distribution. RO-3306 enhances p53-mediated apoptosis. RO-3306 cooperates with Nutlin-3 in activating Bax and inducing mitochondrial apoptosis. RO-3306 (5 μM) downregulates antiapoptotic p21, Bcl-2 and survivin protein expression in AML. RO-3306 inhibits p53-induced p21 synthesis. RO-3306 does not inhibit RNA polymerase II CTD phosphorylation^[2]. RO-3306 (10 μM) effectively arrests oocyte maturation. RO-3306 reduces the blastocyst formation in oocytes^[3].



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