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

AT7519

Catalog No: tcsc0017

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
844442-38-2

Formula:
$C_{16}H_{17}Cl_2N_5O_2$

Pathway:
Cell Cycle/DNA Damage

Target:
CDK

Purity / Grade:
>98%

Solubility:
10 mM in DMSO

Observed Molecular Weight:
382.24

Product Description

AT7519 as a potent inhibitor of **CDKs**, with **IC_{50}**s of 210, 47, 100, 13, 170, and

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IC50 & Target: IC50: [2]

In Vitro: AT7519 (0-4 μM) results in dose-dependent cytotoxicity with IC_{50}s ranging from 0.5 to 2 μM in MM cells, and this induced cytotoxicity is associated with GSK-3β activation independent of transcriptional inhibition. AT7519 overcomes proliferative advantage conferred by cytokines and the protective effect of BMSC. AT7519 (0.5 μM) induces apoptosis of MM cells in a time-dependent manner. Moreover, AT7519 (0.5 μM) inhibits phosphorylation of RNA polymerase II CTD and partially inhibits RNA synthesis in MM.1S cells[1]. AT7519 (250 nM) inhibits cell cycle progression in human tumor cell lines. AT7519 also induces apoptosis of human tumor cell lines[2]. AT7519 (100-700 nM) induces apoptosis in leukemia cell lines. AT7519 also inhibits transcription in human tumor cell lines. Furthermore, AT7519 inhibits RNA polymerase II and reduces antiapoptotic protein levels[3].

In Vivo: AT7519 inhibits tumor growth in a human MM xenograft mouse model[1]. AT7519 (4.6 and 9.1 mg/kg/dose) inhibits the growth of early-stage HCT116 tumor xenografts. AT7519 (10 mg/kg, i.p.) also inhibits the target CDKs in HCT116 tumor-bearing BALB/c nude mice[2].