

AT7519 (Hydrochloride)

Catalog No: tcsc0699



Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg



Specifications

CAS No:

902135-91-5

Formula:

$C_{16}H_{18}Cl_3N_5O_2$

Pathway:

Cell Cycle/DNA Damage

Target:

CDK

Purity / Grade:

>98%

Solubility:

DMSO : ≥ 300 mg/mL (716.49 mM)

Observed Molecular Weight:

418.71

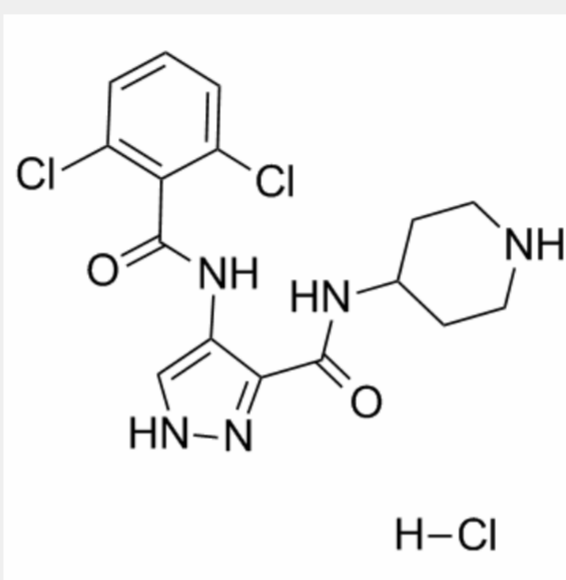
Product Description

AT7519 Hydrochloride is a potent inhibitor of **CDKs**, with **IC₅₀s** of 210, 47, 100, 13, 170, and

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-3 β 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].



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