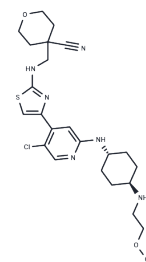


JSH-150

Chemical Properties

CAS No. : 2247481-21-4
Formula: C₂₄H₃₃ClN₆O₂S
Molecular Weight: 505.08
Appearance: no data available
Storage: keep away from direct sunlight, store at low temperature
Powder: -20°C for 3 years | In solvent: -80°C for 1 year



Biological Description

Description	JSH-150 is a highly selective CDK9 inhibitor (IC ₅₀ : 1 nM).
Targets (IC ₅₀)	CDK
In vitro	A highly selective inhibitor compound 40 (JSH-150), which exhibited an IC ₅₀ of 1 nM against CDK9 kinase in the biochemical assay and achieved around 300 10000-fold selectivity over other CDK kinase family members. In addition, it also displayed high selectivity over other 468 kinases/mutants (KINOMEScan S score(1) = 0.01). Compound 40 displayed potent antiproliferative effects against melanoma, neuroblastoma, hepatoma, colon cancer, lung cancer as well as leukemia cell lines. It could dose-dependently inhibit the phosphorylation of RNA Pol II, suppress the expression of MCL-1 and c-Myc, arrest the cell cycle and induce the apoptosis in the leukemia cells.
In vivo	In the MV4-11 cell-inoculated xenograft mouse model, 10 mg/kg dosage of 40 could almost completely suppress the tumor progression. The high selectivity and good in vivo PK/PD profile suggested that 40 would be a good pharmacological tool to study CDK9-mediated physiology and pathology as well as a potential drug candidate for leukemia and other cancers.

Solubility Information

Solubility	DMSO: 16 mg/mL (31.68 mM), Sonication is recommended. (< 1 mg/mL refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.9799 mL	9.8994 mL	19.7988 mL
5 mM	0.396 mL	1.9799 mL	3.9598 mL
10 mM	0.198 mL	0.9899 mL	1.9799 mL
50 mM	0.0396 mL	0.198 mL	0.396 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

Beilei Wang, et al. Discovery of 4-(((4-(5-chloro-2-(((1s,4s)-4-((2-methoxyethyl)amino)cyclohexyl)amino)pyridin-4-yl)thiazol-2-yl)amino)methyl)tetrahydro-2H-pyran-4-carbonitrile (JSH-150) as a novel highly selective and

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