Data Sheet (Cat.No.T64370)



JI6

Chemical Properties

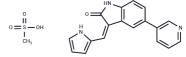
CAS No.: 856436-16-3

Formula: C19H17N3O4S

Molecular Weight: 383.42

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year



Biological Description

Description	JI6 (JAK3 Inhibitor VI) is a potent, selective and orally active FLT3 inhibitor. JI6 exhibits IC50s of 40, 8, and 4 nM for FLT3-WT, FLT3-D835Y, and FLT3-D835H, respectively. JI6 also inhibits c-Kit and JAK3, with IC50s of 500 and 250 nM, respectively. JI6 has research value in acute myeloid leukemia.	
Targets(IC50)	FLT	
In vitro	JI6 (3-1000 nM; 1-4 days) inhibits MV4-11 cell viability in a dose-dependent manner with IC50 of 25 nM. JI6 (1-2000 nM; 48 h) potently inhibits the viability of HCD-57 cells expressing FLT3-ITD, FLT3-D835Y and FLT3-D835H with IC50 of 40 nM. JI6 has no effect on the parent HCD-57 or JAK2V617F expressing cells. JI6 (100-500 nM; 24 h) induce apoptosis and cell cycle arrest in HCD-57 cells expressing FLT3-ITD and FLT3-D835Y. JI6 (50-500 nM; 3 h) inhibits phosphorylation of FLT3, ERK and Akt in HCD-57 cells expressing FLT3-ITD and FLT3-D835Y[1].	
In vivo	6 (15 mg/kg; i.p. daily for 3 weeks) inhibits the proliferation of HCD-57 expressing LT3-D835Y in SCID mouse and prolong the survival. JI6 (25 mg/kg; p.o. daily for 3 yeeks) inhibits myeloproliferative phenotype in FLT3-ITD knock-in mice. JI6 (100 mg/kg; single i.p.) significantly inhibits FLT3 phosphorylation and downstream signal ransduction in mice expressing FLT3-D835Y[1].	

Solubility Information

Solubility	DMSO: 4.5 mg/mL (11.7 mM), Sonication is recommended.	
	(< 1 mg/ml refers to the product slightly soluble or insoluble)	

Page 1 of 2 www.targetmol.com

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.6081 mL	13.0405 mL	26.0811 mL
5 mM	0.5216 mL	2.6081 mL	5.2162 mL
10 mM	0.2608 mL	1.3041 mL	2.6081 mL
50 mM	0.0522 mL	0.2608 mL	0.5216 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

Chen Y, et, al. Identification of an orally available compound with potent and broad FLT3 inhibition activity. Oncogene. 2016 Jun 9;35(23):2971-8.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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Page 2 of 2 www.targetmol.com