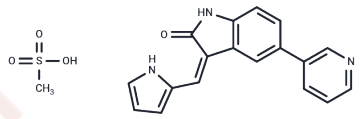
Data Sheet (Cat.No.T64370)

JI6

Chemical Properties



CAS No. :	856436-16-3
Formula:	C19H17N3O4S
Molecular Weight:	383.42
Storage:	Powder: -20°C for 3 years | In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.

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,c-Kit,JAK
In vitro	JI6 (3-1000 nM; 1-4 days) inhibits MV4-11 cell viability dose-dependently with an IC50 of 25 nM. It also potently inhibits the viability of HCD-57 cells expressing FLT3-ITD, FLT3-D835Y, and FLT3-D835H (1-2000 nM; 48 h) with an IC50 of 40 nM, while showing no effect on parent HCD-57 or JAK2V617F expressing cells. Additionally, JI6 (100-500 nM; 24 h) induces apoptosis and cell cycle arrest, and (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	JI6 (15 mg/kg; i.p. daily for 3 weeks) inhibits the proliferation of HCD-57 expressing FLT3-D835Y in SCID mice and prolongs survival. JI6 (25 mg/kg; p.o. daily for 3 weeks) inhibits the myeloproliferative phenotype in FLT3-ITD knock-in mice. JI6 (100 mg/kg; a single i.p.) significantly inhibits FLT3 phosphorylation and downstream signal transduction in mice expressing FLT3-D835Y[1].

Solubility Information

Solubility	DMSO: 4.5 mg/mL (11.74 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

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.