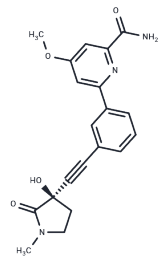
Data Sheet (Cat.No.T16290)

TargetMol

NIK SMI1

Chemical Properties



CAS No. : 1660114-31-7

Formula: C20H19N3O4

Molecular Weight: 365.38

Appearance: no data available

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

Biological Description

Description	NIK SMI1 is an effective and selective NF-κB inducing kinase (NIK) inhibitor. It also inhibits NIK-catalyzed hydrolysis of ATP to ADP (IC50: 0.23±0.17 nM).
Targets(IC50)	NF-κB
In vitro	NIK SMI1 inhibits the expression of NIK SMI1 response element regulated firefly luciferase reporter gene in HEK293 cells (IC50: 34±6 nM). NIK SMI1 inhibits BAFF-induced B cell (mouse) survival in vitro with an IC50 of 373±64 nM. Consistent with expectations for a NIK inhibitor, NIK SMI1 is shown to inhibit nuclear translocation of p52 (RelB) (IC50=70 nM).
In vivo	The pharmacology of NIK SMI1 is examined in SD rat, CD-1 mouse, beagle, and cynomologous monkey with 20, 32, 18, and 7.8 mL/kg per min, respectively. The volume of distribution (Vd, L/kg) is 1.35, 1.58, 0.778, and 1.39, respectively. C57BL/6 mice are treated twice daily for 7 days with orally administered NIK SMI1 or with three injections of recombinant BAFF receptor fusion protein (Br3- mIgG2a) over the course of the 7-day experiment as a positive control .

Solubility Information

Solubility	DMSO: 100 mg/mL (273.69 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.7369 mL	13.6844 mL	27.3688 mL
5 mM	0.5474 mL	2.7369 mL	5.4738 mL
10 mM	0.2737 mL	1.3684 mL	2.7369 mL
50 mM	0.0547 mL	0.2737 mL	0.5474 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

Blaquiere N, et al. Scaffold-Hopping Approach To Discover Potent, Selective, and Efficacious Inhibitors of NF-κB Inducing Kinase. J Med Chem. 2018 Aug 9;61(15):6801-6813.