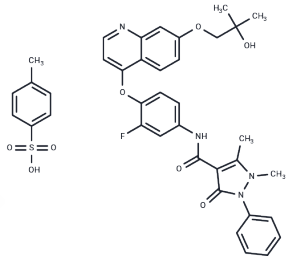
Data Sheet (Cat.No.TQ0041)

TargetMol

Ningetinib Tosylate

Chemical Properties



CAS No. : 1394820-77-9

Formula: C38H37FN4O8S

Molecular Weight: 728.79

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	Ningetinib Tosylate is an orally bioavailable tyrosine kinase inhibitor with IC50s of <1.0, 1.9 and 6.7 nM for Axl, VEGFR2, and c-Met, respectively.
Targets(IC50)	c-Met/HGFR,TAM Receptor,VEGFR
In vitro	In cell-based functional assays, Ningetinib inhibits VEGF and HGF-stimulated HUVEC proliferation and microvascular angiogenesis in rat aortic rings with IC50 values of 6.3 and 8.6 nM, respectively.
In vivo	In the orthotopic U87MG human glioblastoma xenograft model, Ningetinib prolongs the median survival time and yields a significant increase in life-span value (ILS=32%) at an oral dose of 20 mg/kg/day (dosed 21 days) versus the vehicle-treated group. When single dosed orally (3 mg/kg) to U87MG tumor-bearing nude mice, Ningetinib potently inhibits the phosphorylation of c-Met and its downstream signaling kinases AKT and ERK1/2 for up to 6 hours in tumor tissues.

Solubility Information

Solubility	DMSO: 8 mg/mL (10.98 mM),Sonication and heating are recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 1 mg/mL (1.37 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.3721 mL	6.8607 mL	13.7214 mL
5 mM	0.2744 mL	1.3721 mL	2.7443 mL
10 mM	0.1372 mL	0.6861 mL	1.3721 mL
50 mM	0.0274 mL	0.1372 mL	0.2744 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

Ning Xi, et al. Abstract 1755: CT053PTSA, a novel c-MET and VEGFR2 inhibitor, potently suppresses angiogenesis and tumor growth. Cancer Res 2014;74(19 Suppl):Abstract nr 1755.