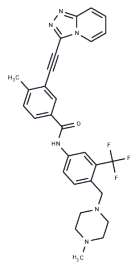
Data Sheet (Cat.No.T63746)

TargetMol

Vamotinib

Chemical Properties



CAS No. : 1416241-23-0

Formula: C29H27F3N6O

Molecular Weight: 532.56

Storage: Keep away from direct sunlight
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	Vamotinib (PF-114) is an orally active and specific tyrosine kinase inhibitor with antiproliferative and antitumour activity.Vamotinib inhibits the phosphorylation of BCR/ABL and BCR/ABL-T315I, which promotes apoptosis. Vamotinib is used to study drug-resistant Philadelphia chromosome-positive (Ph+) leukaemia and Alzheimer's disease.
Targets(IC50)	Apoptosis,Bcr-Abl,Tyrosine Kinases
In vitro	Vamotinib (0-1000 nM) inhibits the autophosphorylation of BCR/ABL and BCR/ABL-T315I in a dose-dependent manner. Additionally, it can suppress the growth of Ph+ patient-derived cell lines, including K562, KCL-22, SupB15, Tom-1, BV-173, as well as Ph+ PD-LTC cells with non-mutated resistance and T315I mutation[1].
In vivo	In female BALB/cAnNRj-Foxn1nu mice (K562 nude mouse xenograft model), Vamotinib (25/40 mg/kg, oral gavage; 14 days) resulted in a 100% reduction in average tumor volume within 4 weeks.

Solubility Information

Solubility	DMSO: 30 mg/mL (56.33 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 2 mg/mL (3.76 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	1.8777 mL	9.3886 mL	18.7772 mL
5 mM	0.3755 mL	1.8777 mL	3.7554 mL
10 mM	0.1878 mL	0.9389 mL	1.8777 mL
50 mM	0.0376 mL	0.1878 mL	0.3755 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

Mian AA, et al. PF-114, a potent and selective inhibitor of native and mutated BCR/ABL is active against Philadelphia chromosome-positive (Ph+) leukemias harboring the T315I mutation. Leukemia. 2015 May;29(5): 1104-14.