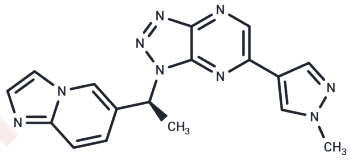
Data Sheet (Cat.No.TQ0210)

TargetMol

Savolitinib

Chemical Properties



CAS No. : 1313725-88-0

Formula: C17H15N9

Molecular Weight: 345.36

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	Savolitinib (Volitinib) (AZD-6094) is an effective, selective, and orally bioavailable c-Met inhibitor (IC50s: 5 nM/3 nM for c-Met/p-Met).
Targets(IC50)	c-Met/HGFR
In vitro	Savolitinib selectively binds to and inhibits the activation of c-Met in an ATP-competitive manner, and disrupts c-Met signal transduction pathways [1,2].
In vivo	In a U87MG subcutaneous xenograft model, Savolitinib (1-10.0 mg/kg; oral administration; daily; for 21 days; athymic nude mice) demonstrates dose-dependent tumor growth inhibition. In addition, none of the mice in the dosing groups exhibits body weight loss during the experiment [1].

Solubility Information

Solubility	DMSO: 32 mg/mL (92.66 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (5.79 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	2.8955 mL	14.4776 mL	28.9553 mL
5 mM	0.5791 mL	2.8955 mL	5.7911 mL
10 mM	0.2896 mL	1.4478 mL	2.8955 mL
50 mM	0.0579 mL	0.2896 mL	0.5791 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

Jia H, et al. Discovery of (S)-1-(1-(Imidazo[1,2-a]pyridin-6-yl)ethyl)-6-(1-methyl-1H-pyrazol-4-yl)-1H-[1,2,3] triazolo[4,5-b]pyrazine (volitinib) as a highly potent and selective mesenchymal-epithelial transition factor (c-Met) inhibitor in clinical development for treatment of cancer. J Med Chem. 2014 Sep 25;57(18):7577-89.

Yu J, Zhang L, Peng J, et al. Dictamnine, a novel c-Met inhibitor, suppresses the proliferation of lung cancer cells by downregulating the PI3K/AKT/mTOR and MAPK signaling pathways. Biochemical pharmacology. 2022, 195: 114864.

Gavine PR, et al. Volitinib, a potent and highly selective c-Met inhibitor, effectively blocks c-Met signaling and growth in c-MET amplified gastric cancer patient-derived tumor xenograft models. Mol Oncol. 2015 Jan;9(1):323-33.