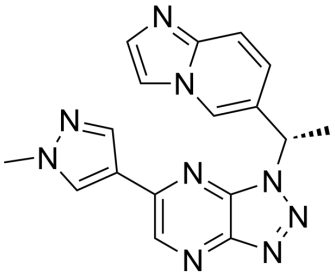
Savolitinib

Cat. No.:	HY-15959
CAS No.:	1313725-88-0
Molecular Formula:	$C_{17}H_{15}N_9$
Molecular Weight:	345.36
Target:	c-Met/HGFR
Pathway:	Protein Tyrosine Kinase/RTK
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 2 years -20°C 1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 20.83 mg/mL (60.31 mM)

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
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

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.08 mg/mL (6.02 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: 2.08 mg/mL (6.02 mM); Suspended solution; Need ultrasonic
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.08 mg/mL (6.02 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Savolitinib (AZD-6094) is a potent, highly selective, and orally bioavailable c-Met inhibitor with IC_{50} s of 5 nM and 3 nM for c-Met and p-Met, respectively. Savolitinib (AZD-6094) selectively binds to and inhibits the activation of c-Met in an ATP-competitive manner, and disrupts c-Met signal transduction pathways. Antineoplastic activity[1][2].

IC_{50} & Target

IC50: 5 nM (c-Met) and 3 nM (p-Met)[1]

In Vivo

Savolitinib (Compound 28; 1-10.0 mg/kg; oral administration; daily; for 21 days; athymic nude mice) demonstrates dose-dependent tumor growth inhibition in a U87MG subcutaneous xenograft model. In addition, none of the mice in the dosing groups exhibits body weight loss during the experiment[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	U87MG xenograft model in athymic nude mice[1]
Dosage:	1 mg/kg, 2.5 mg/kg and 10.0 mg/kg
Administration:	Oral administration; daily; for 21 days
Result:	Demonstrated dose-dependent tumor growth inhibition in a U87MG subcutaneous xenograft model.

CUSTOMER VALIDATION

- J Thorac Oncol. 2019 Oct;14(10):1753-1765.
- Transl Lung Cancer Res. 2020 Oct;9(5):1810-1821.
- J Sep Sci. 2017 Oct;40(19):3782-3791.
- Separations. 2023 May 9, 10(5), 302.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. 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.

[2]. 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.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA