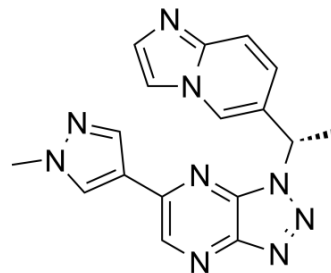


Savolitinib

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	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 25 mg/mL (72.39 mM; Need ultrasonic)
 H₂O : < 0.1 mg/mL (insoluble)

Preparing Stock Solutions	Solvent Concentration	Mass		
		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

- 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
- 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
- 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 IC₅₀s 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]}.

IC₅₀ & 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.

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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.

Caution: Product has not been fully validated for medical applications. For research use only.

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