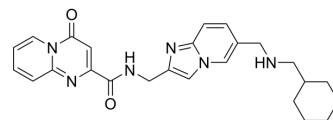


STM2457

Cat. No.:	HY-134836		
CAS No.:	2499663-01-1		
Molecular Formula:	C ₂₅ H ₂₈ N ₆ O ₂		
Molecular Weight:	444.53		
Target:	Apoptosis		
Pathway:	Apoptosis		
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 : 50 mg/mL (112.48 mM; ultrasonic and warming and heat to 60°C)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM	2.2496 mL	11.2478 mL	22.4957 mL
		5 mM	0.4499 mL	2.2496 mL	4.4991 mL
10 mM		0.2250 mL	1.1248 mL	2.2496 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 (4.68 mM); Clear solution				
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (4.68 mM); Clear solution				
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (4.68 mM); Clear solution				

BIOLOGICAL ACTIVITY

Description	STM2457 is a first-in-class, highly potent, selective and orally active METTL3 inhibitor with an IC ₅₀ of 16.9 nM. STM2457 can be used for the research of acute myeloid leukaemia (AML) ^{[1][2]} .
In Vitro	STM2457 (Compound 72) inhibits MOLM13 cells proliferation with an IC ₅₀ of 8.699 μM ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Nat Biotechnol. 2023 Mar;41(3):355-366.
- Gastroenterology. 2022 Jun 11;S0016-5085(22)00629-1.
- Cancer Commun (Lond). 2022 Mar 9.
- Cell Rep Med. 2023 Aug 15;4(8):101144.
- J Hazard Mater. 2023 Jun 19;458:131891.

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REFERENCES

[1]. Wesley Peter Blackaby, et al. Mettl3 inhibitory compounds. WO2020201773A1.

[2]. Eliza Yankova, et al. Small molecule inhibition of METTL3 as a strategy against myeloid leukaemia. Nature. 2021 Apr 26.

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

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