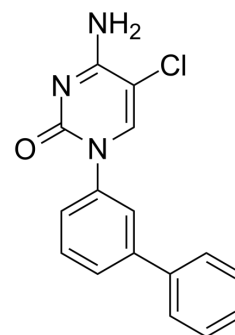


Bobcat339

Cat. No.:	HY-111558	
CAS No.:	2280037-51-4	
Molecular Formula:	C ₁₆ H ₁₂ ClN ₃ O	
Molecular Weight:	297.74	
Target:	DNA Methyltransferase; TET Protein	
Pathway:	Epigenetics	
Storage:	Powder	-20°C 3 years
	In solvent	-80°C 6 months
		-20°C 1 month



SOLVENT & SOLUBILITY

In Vitro	DMSO : 5 mg/mL (16.79 mM; ultrasonic and warming and heat to 60°C)					
	Preparing Stock Solutions	Solvent	Mass	1 mg	5 mg	10 mg
		Concentration				
		1 mM		3.3586 mL	16.7932 mL	33.5864 mL
		5 mM		0.6717 mL	3.3586 mL	6.7173 mL
10 mM		0.3359 mL	1.6793 mL	3.3586 mL		
Please refer to the solubility information to select the appropriate solvent.						
In Vivo	1. Add each solvent one by one: 0.5% CMC-Na/saline water Solubility: 3.33 mg/mL (11.18 mM); Suspended solution; Need ultrasonic and warming and heat to 60°C					

BIOLOGICAL ACTIVITY

Description	Bobcat339 is a potent and selective cytosine-based inhibitor of TET enzyme, with IC ₅₀ s of 33 μM and 73 μM for TET1 and TET2, respectively. Bobcat339 is useful to the field of epigenetics and serves as a starting point for new therapeutics that target DNA methylation and gene transcription ^[1] .	
IC ₅₀ & Target	TET1 33 μM (IC ₅₀)	TET2 73 μM (IC ₅₀)
In Vitro	Bobcat339 (10 μM; 24 hours) significantly reduces global 5hmC levels by inhibiting TET enzyme function in HT-22 cells ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	

CUSTOMER VALIDATION

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- J Clin Invest. 2023 Aug 29;e170173.
 - Theranostics. 2021 Jun 11;11(16):7640-7657.
 - Environ Sci Technol. 2021 Feb 11.
 - Clin Sci. 2023 Aug 31;137(16):1265-1283.
 - Cancers (Basel). 2022 Jun 16;14(12):2983.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Chua GNL, et, al. Cytosine-Based TET Enzyme Inhibitors. ACS Med Chem Lett. 2019 Jan 31; 10(2): 180-185.

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

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