

PRMT5:MEP50 PPI

Cat. No.: HY-151576

Molecular Formula: $C_{24}H_{22}N_4O_4$

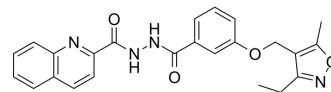
Molecular Weight: 430.46

Target: Others

Pathway: Others

Storage: 4°C, sealed storage, away from moisture

* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 200 mg/mL (464.62 mM; Need ultrasonic)					
	Preparing Stock Solutions	<div>Solvent Concentration</div>	Mass	1 mg	5 mg	10 mg
		1 mM		2.3231 mL	11.6155 mL	23.2310 mL
		5 mM		0.4646 mL	2.3231 mL	4.6462 mL
		10 mM		0.2323 mL	1.1615 mL	2.3231 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: ≥ 5 mg/mL (11.62 mM); Clear solution					

BIOLOGICAL ACTIVITY

Description	PRMT5:MEP50 PPI is a novel PRMT5:MEP50 protein-protein interaction (PRMT5:MEP50 PPI) inhibitor, shows anti-tumor activity and anti-proliferative activity of lung and prostate cancer cells ^[1] .	
In Vitro	PRMT5:MEP50 PPI (0-10 μM; 72 h) inhibits the growth of prostate cancer cells ^[1] . PRMT5:MEP50 PPI (250-1000 nM; 72 h) decreases the expression of global arginine 3 residue of histone H4 (H4R3me2s) level in prostate cancer cells ^[1] . PRMT5:MEP50 PPI (500 nM; 72 h) de-represses the PRMT5: MEP50-regulated IVL gene of prostate cancer cells ^[1] . PRMT5:MEP50 PPI treatment inhibits multiple PRMT5-regulated pathways critical to the survival and proliferation of lung and prostate cancer cells ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only. Cell Viability Assay ^[1]	
	Cell Line:	LNCaP cells

Concentration:	0-10 μ M
Incubation Time:	72 h
Result:	Showed IC ₅₀ value of 430.2 nM.

Western Blot Analysis^[1]

Cell Line:	LNCaP cells
Concentration:	250, 500 and 1000 nM
Incubation Time:	72 h
Result:	Observed global arginine 3 residue of histone H4 (H4R3me2s) decreased by 65%.

RT-PCR^[1]

Cell Line:	LNCaP cells
Concentration:	500 nM
Incubation Time:	72 h
Result:	De-repressed the PRMT5: MEP50-regulated IVL gene without significantly altering the expression of the PRMT5: pICln-regulated AR gene.

REFERENCES

[1]. Asberry AM, et al. Discovery and Biological Characterization of PRMT5:MEP50 Protein-Protein Interaction Inhibitors. J Med Chem. 2022 Oct 7.

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

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