Proteins

Inhibitors

Product Data Sheet

MS117

Cat. No.: HY-133740 CAS No.: 2702280-86-0 Molecular Formula: $C_{17}H_{22}N_4O$ Molecular Weight: 298.38

Target: Histone Methyltransferase

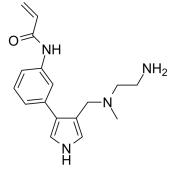
Pathway: **Epigenetics**

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: 100 mg/mL (335.14 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	3.3514 mL	16.7572 mL	33.5143 mL
	5 mM	0.6703 mL	3.3514 mL	6.7029 mL
	10 mM	0.3351 mL	1.6757 mL	3.3514 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: ≥ 2.5 mg/mL (8.38 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE- β -CD in saline) Solubility: ≥ 2.5 mg/mL (8.38 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (8.38 mM); Clear solution

BIOLOGICAL ACTIVITY

Description	MS117 is a first-in-class and cell-active irreversible protein arginine methyltransferase 6 (PRMT6) covalent inhibitor, with an IC_{50} of 18 $nM^{[1]}$.
IC ₅₀ & Target	PRMT6
In Vitro	MS117 (Compound 4) inhibits the PRMT6 methyltransferase activity in a time-dependent manner $^{[1]}$. MS117 (Compound 4) shows moderate selectivity (6-fold) for PRMT6 over PRMT1 (IC ₅₀ = 0.1 \pm 0.025 μ M) and PRMT8 (IC ₅₀ =



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

REFERENCES

[1]. Yudao Shen, et al. Discovery of a First-in-Class Protein Arginine Methyltransferase 6 (PRMT6) Covalent Inhibitor. J Med Chem. 2020 May 28;63(10):5477-5487.

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

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