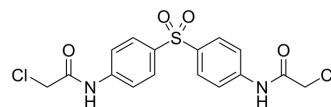


## TC-E 5003

Cat. No.:	HY-107574		
CAS No.:	17328-16-4		
Molecular Formula:	C <sub>16</sub> H <sub>14</sub> Cl <sub>2</sub> N <sub>2</sub> O <sub>4</sub> S		
Molecular Weight:	401.26		
Target:	Histone Methyltransferase		
Pathway:	Epigenetics		
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 : 125 mg/mL (311.52 mM; Need ultrasonic)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	2.4921 mL	12.4607 mL	24.9215 mL
	5 mM	0.4984 mL	2.4921 mL	4.9843 mL
	10 mM	0.2492 mL	1.2461 mL	2.4921 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 (5.18 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: ≥ 2.08 mg/mL (5.18 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 2.08 mg/mL (5.18 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

TC-E 5003 is a selective PRMT1 inhibitor with an IC<sub>50</sub> of 1.5 μM against hPRMT1. TC-E 5003 has anti-inflammatory properties in TLR4 signaling<sup>[1][2]</sup>.

### REFERENCES

- [1]. Bissinger EM, et al. Acyl derivatives of p-aminosulfonamides and dapsone as new inhibitors of the arginine methyltransferase hPRMT1. Bioorg Med Chem.

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2011;19(12):3717-3731.

[2]. Kim E, et al. Protein Arginine Methyltransferase 1 (PRMT1) Selective Inhibitor, TC-E 5003, Has Anti-Inflammatory Properties in TLR4 Signaling. Int J Mol Sci. 2020;21(9):3058. Published 2020 Apr 26.

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

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