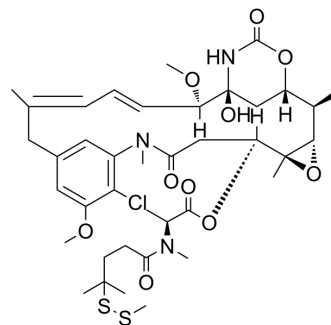


DM4-SMe

Cat. No.:	HY-130082		
CAS No.:	796073-68-2		
Molecular Formula:	C ₃₉ H ₅₆ ClN ₃ O ₁₀ S ₂		
Molecular Weight:	826.46		
Target:	ADC Cytotoxin; Microtubule/Tubulin		
Pathway:	Antibody-drug Conjugate/ADC Related; Cell Cycle/DNA Damage; Cytoskeleton		
Storage:	Powder	-20°C	3 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (121.00 mM; Need ultrasonic)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	1.2100 mL	6.0499 mL	12.0998 mL
5 mM	0.2420 mL	1.2100 mL	2.4200 mL
10 mM	0.1210 mL	0.6050 mL	1.2100 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: ≥ 2.5 mg/mL (3.02 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.5 mg/mL (3.02 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 2.5 mg/mL (3.02 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

DM4-SMe is a metabolite of antibody-maytansin conjugates (AMCs) and a tubulin inhibitor, and also a cytotoxic moiety of antibody-drug conjugates (ADCs), which can be linked to antibody through disulfide bond or stable thioether bond. DM4-SMe inhibits KB cells with an IC₅₀ of 0.026 nM^{[1][2]}.

IC₅₀ & Target

Maytansinoids

REFERENCES

[1]. Widdison W, et al. Metabolites of antibody-maytansinoid conjugates: characteristics and in vitro potencies. Mol Pharm. 2015 Jun 1;12(6):1762-73.

[2]. Chen H, et al. Tubulin Inhibitor-Based Antibody-Drug Conjugates for Cancer Therapy. Molecules. 2017 Aug 1;22(8).

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

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