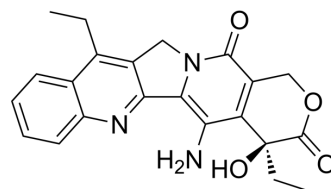


TH1338

Cat. No.:	HY-120574		
CAS No.:	1258494-60-8		
Molecular Formula:	C ₂₂ H ₂₁ N ₃ O ₄		
Molecular Weight:	391.42		
Target:	ADC Cytotoxin; Topoisomerase		
Pathway:	Antibody-drug Conjugate/ADC Related; Cell Cycle/DNA Damage		
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 : 10 mg/mL (25.55 mM; Need ultrasonic)					
		Solvent Concentration	Mass	1 mg	5 mg	10 mg
	Preparing Stock Solutions	1 mM		2.5548 mL	12.7740 mL	25.5480 mL
		5 mM		0.5110 mL	2.5548 mL	5.1096 mL
10 mM			0.2555 mL	1.2774 mL	2.5548 mL	
Please refer to the solubility information to select the appropriate solvent.						
In Vivo	1. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 1.82 mg/mL (4.65 mM); Clear solution					

BIOLOGICAL ACTIVITY

Description	TH1338 (compound 3b), an orally active camptothecin derivative and a potent chemotherapeutic agent for cancer, demonstrates excellent cytotoxic potency against human tumor cell lines in vitro. TH1338 (compound 3b) possesses significant brain penetration, favorable efflux pump properties, and hematological toxicity profile ^{[1][2]} .	
In Vitro	TH1338 (compound 3b) demonstrates significant brain penetration when dosed orally in mice ^[1] . TH1338 (compound 3b) exhibits potent anti-tumor activity in H460 (NSCLC) human tumor xenograft model ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
	Cell Viability Assay ^[1]	
	Cell Line:	H460 (NSCLC) human tumor xenograft model.
Concentration:	40 mg/kg.	

Incubation Time:	Oral gavage.
Result:	Exhibited superior antitumor activity.

REFERENCES

- [1]. Jian-Xin Duan, et al. 14-Aminocamptothecins: their synthesis, preclinical activity, and potential use for cancer treatment. J Med Chem. 2011 Mar 24;54(6):1715-23.
- [2]. Xia Cheng, et al. Preparation, Characterization, and In Vivo Study of 7-Ethyl-14-Aminocamptothecin-Loaded Poly(Ethylene Glycol)2000 -Poly(Lactic Acid)2000 Polymeric Micelles Against H460 Human Nonsmall Cell Lung Carcinoma. J Pharm Sci. 2015 Nov;104(11):3934-3942.

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

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