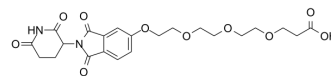


Thalidomide-PEG4-COOH

Cat. No.:	HY-138774
CAS No.:	2828438-28-2
Molecular Formula:	C ₂₂ H ₂₆ N ₂ O ₁₀
Molecular Weight:	478.45
Target:	E3 Ligase Ligand-Linker Conjugates
Pathway:	PROTAC
Storage:	-20°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 250 mg/mL (522.52 mM; Need ultrasonic)				
		Solvent Concentration	Mass		
	Preparing Stock Solutions		1 mg	5 mg	10 mg
		1 mM	2.0901 mL	10.4504 mL	20.9008 mL
		5 mM	0.4180 mL	2.0901 mL	4.1802 mL
	10 mM	0.2090 mL	1.0450 mL	2.0901 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: ≥ 2.08 mg/mL (4.35 mM); Clear solution				
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.08 mg/mL (4.35 mM); Clear solution				
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (4.35 mM); Clear solution				

BIOLOGICAL ACTIVITY

Description	Thalidomide-PEG4-COOH is a synthesized E3 ligase ligand-linker conjugate that incorporates the Thalidomide based cereblon ligand and a linker used in PROTAC technology ^[1] .
IC ₅₀ & Target	Cereblon
In Vitro	PROTACs contain two different ligands connected by a linker; one is a ligand for an E3 ubiquitin ligase and the other is for the target protein. PROTACs exploit the intracellular ubiquitin-proteasome system to selectively degrade target proteins ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Sato T, et al. Cereblon-Based Small-Molecule Compounds to Control Neural Stem Cell Proliferation in Regenerative Medicine. *Front Cell Dev Biol.* 2021;9:629326. Published 2021 Mar 11.

[2]. Nalawansa DA, et al. PROTACs: An Emerging Therapeutic Modality in Precision Medicine. *Cell Chem Biol.* 2020;27(8):998-986.

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

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