# **BACE** MedChemExpress

# Product Data Sheet

# Inhibitors • Screening Libraries • Proteins

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## Thalidomide-Propargyne-PEG3-COOH

Cat. No		
Cat. No.:	HY-138776	
CAS No.:	2797649-54-6	_
Molecular Formula:	$C_{23}H_{24}N_2O_9$	HN
Molecular Weight:	472.44	N C
Target:	E3 Ligase Ligand-Linker Conjugates	
Pathway:	PROTAC	
Storage:	-20°C, sealed storage, away from moisture and light	
	* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture	
	and light)	

### SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (211.67 mM; Need ultrasonic)					
	Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg	
		1 mM	2.1167 mL	10.5834 mL	21.1667 mL	
		5 mM	0.4233 mL	2.1167 mL	4.2333 mL	
		10 mM	0.2117 mL	1.0583 mL	2.1167 mL	
	Please refer to the so	lubility information to select the app	propriate solvent.			
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (5.29 mM); Clear solution					
	2. Add each solvent Solubility: ≥ 2.5 m	one by one: 10% DMSO >> 90% (20 g/mL (5.29 mM); Clear solution	% SBE-β-CD in saline)			

Description	Thalidomide-Propargyne-PEG3-COOH is a synthesized E3 ligase ligand-linker conjugate that incorporates the Thalidomide based cereblon ligand and a linker used in PROTAC technology <sup>[1]</sup> . Thalidomide-Propargyne-PEG3-COOH is a click chemistry reagent, it contains an Alkyne group and can undergo copper-catalyzed azide-alkyne cycloaddition (CuAAc) with molecules containing Azide groups.			
IC <sub>50</sub> & 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 <sup>[2]</sup> . 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]. Nalawansha DA, et al. PROTACs: An Emerging Therapeutic Modality in Precision Medicine. Cell Chem Biol. 2020;27(8):998-988.

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

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