

# **Product** Data Sheet

## Thalidomide-O-PEG4-azide

 Cat. No.:
 HY-140844

 CAS No.:
 2380318-57-8

 Molecular Formula:
 C23H29N5O9

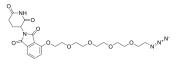
Molecular Weight: 519.5

Target: E3 Ligase Ligand-Linker Conjugates; Apoptosis; Autophagy

Pathway: PROTAC; Apoptosis; Autophagy

Storage: -20°C, sealed storage, away from moisture

\* In solvent: -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



#### **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 250 mg/mL (481.23 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	1.9249 mL	9.6246 mL	19.2493 mL
	5 mM	0.3850 mL	1.9249 mL	3.8499 mL
	10 mM	0.1925 mL	0.9625 mL	1.9249 mL

Please refer to the solubility information to select the appropriate solvent.

### **BIOLOGICAL ACTIVITY**

Description	Thalidomide-O-PEG4-azide is a synthesized E3 ligase ligand-linker conjugate that incorporates the Thalidomide based cereblon ligand and a linker used in PROTAC technology. Thalidomide-O-PEG4-azide is a click chemistry reagent, it contains an Azide group and can undergo copper-catalyzed azide-alkyne cycloaddition reaction (CuAAc) with molecules containing Alkyne groups. Strain-promoted alkyne-azide cycloaddition (SPAAC) can also occur with molecules containing DBCO or BCN 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>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

#### **REFERENCES**

[1]. An S, et al. Small-molecule PROTACs: An emerging and promising approach for the development of targeted therapy drugs. EBioMedicine. 2018 Oct;36:553-562

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

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