**Proteins** 

# Azido-PEG4-alcohol

Cat. No.: HY-22340 CAS No.: 86770-67-4 Molecular Formula:  $C_8H_{17}N_3O_4$ Molecular Weight: 219.24

Target: **PROTAC Linkers** 

Pathway: **PROTAC** 

Pure form Storage: -20°C 3 years

2 years

In solvent -80°C 6 months

> -20°C 1 month

**Product** Data Sheet

### **SOLVENT & SOLUBILITY**

In Vitro

 $H_2O : \ge 100 \text{ mg/mL} (456.12 \text{ mM})$ 

DMSO: 33.33 mg/mL (152.03 mM; ultrasonic and warming and heat to 80°C)

\* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	4.5612 mL	22.8061 mL	45.6121 mL
	5 mM	0.9122 mL	4.5612 mL	9.1224 mL
	10 mM	0.4561 mL	2.2806 mL	4.5612 mL

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

In Vivo

- 1. Add each solvent one by one: PBS
  - Solubility: 100 mg/mL (456.12 mM); Clear solution; Need ultrasonic
- 2. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (11.40 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (11.40 mM); Clear solution
- 4. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (11.40 mM); Clear solution

## **BIOLOGICAL ACTIVITY**

Description

Azido-PEG4-alcohol is a PEG-based PROTAC linker can be used in the synthesis of PROTACs<sup>[1]</sup>. Azido-PEG4-alcohol 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	PEGs		
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]. Zhang F, et al. Discovery of a new class of PROTAC BRD4 degraders based on a dihydroquinazolinone derivative and lenalidomide/pomalidomide. Bioorg Med Chem. 2020 Jan 1;28(1):115228.

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

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