DBCO-PEG4-DBCO

Cat. No.: HY-130346

CAS No.: 2182601-68-7

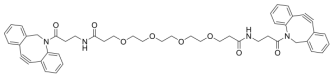
Molecular Formula: $C_{48}H_{50}N_4O_8$

Molecular Weight: 810.93

Target: ADC Linker; PROTAC Linkers

Pathway: Antibody-drug Conjugate/ADC Related; PROTAC

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 : 100 mg/mL (123.32 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	1.2332 mL	6.1658 mL	12.3315 mL
	5 mM	0.2466 mL	1.2332 mL	2.4663 mL
	10 mM	0.1233 mL	0.6166 mL	1.2332 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: ≥ 2.5 mg/mL (3.08 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: 2.5 mg/mL (3.08 mM); Suspended solution; Need ultrasonic
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (3.08 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

DBCO-PEG4-DBCO is a PEG-based PROTAC linker can be used in the synthesis of PROTACs. DBCO-PEG4-DBCO is a cleavable ADC linker used in the synthesis of antibody-drug conjugates (ADCs)[1]. DBCO-PEG4-DBCO is a click chemistry reagent, it contains a DBCO group that can undergo strain-promoted alkyne-azide cycloaddition (SPAAC) with molecules containing Azide groups.

IC_{50} & Target		
	Cleavable Linker	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.

ADCs are comprised of an antibody to which is attached an ADC cytotoxin through an ADC linker.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Adam TIBBLES, et al. Engineered O-glycosylation in recombinant polypeptides via heterologous glycosylation sites. WO2019122234A1.

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