Azido-PEG8-NHS ester

Cat. No.: HY-130184

CAS No.: 1204834-00-3

Molecular Formula: $C_{23}H_{40}N_4O_{12}$

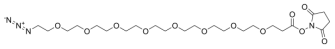
Molecular Weight: 564.58

Target: ADC Linker; PROTAC Linkers

Pathway: Antibody-drug Conjugate/ADC Related; PROTAC

Storage:

Pure form	-20°C	3 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (177.12 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	1.7712 mL	8.8561 mL	17.7123 mL
	5 mM	0.3542 mL	1.7712 mL	3.5425 mL
	10 mM	0.1771 mL	0.8856 mL	1.7712 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 (4.43 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (4.43 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (4.43 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Azido-PEG8-NHS ester is a cleavable 8 unit PEG ADC linker used in the synthesis of antibody-drug conjugates (ADCs)[1]. Azido-PEG8-NHS ester is also a PEG- and Alkyl/ether-based PROTAC linker that can be used in the synthesis of PROTACs[2]. Azido-PEG8-NHS ester 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_{50} & Target			
	PEGs	Alkyl/ether	Cleavable Linker

In Vitro	ADCs are comprised of an antibody to which is attached an ADC cytotoxin through an ADC linker[1]. 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]. Mahendra Persaud Deonarain, et al. Biological materials and uses thereof. WO2016046574A1.

[2]. Rong Yuan, et al. Viruslike Element-Tagged Nanoparticle Inductively Coupled Plasma Mass Spectrometry Signal Multiplier: Membrane Biomarker Mediated Cell Counting. Analytical Chemistry (Washington, DC, United States) (2019), 91(8), 4948-4952.

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