Azido-PEG5-CH2CO2H

Cat. No.: HY-130194

CAS No.: 217180-81-9

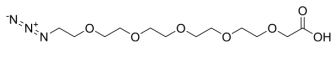
Molecular Formula: $C_{12}H_{23}N_3O_7$

Molecular Weight: 321.33

Target: ADC Linker; PROTAC Linkers

Pathway: Antibody-drug Conjugate/ADC Related; PROTAC

Storage: -20°C, protect from light
* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (311.21 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	3.1121 mL	15.5603 mL	31.1207 mL
	5 mM	0.6224 mL	3.1121 mL	6.2241 mL
	10 mM	0.3112 mL	1.5560 mL	3.1121 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 (7.78 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (7.78 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (7.78 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Azido-PEG5-CH2CO2H is a cleavable 5 unit PEG ADC linker used in the synthesis of antibody-drug conjugates (ADCs). Azido-PEG5-CH2CO2H is also a PEG-based PROTAC linker that can be used in the synthesis of PROTACs[1]. Azido-PEG5-CH2CO2H 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	Cleavable Linker	PEGs

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[1].

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

REFERENCES

[1]. Yong Zu Kim, et al. Antibody-drug conjugates comprising branched linkers and methods related thereto. WO2017089895A1.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA