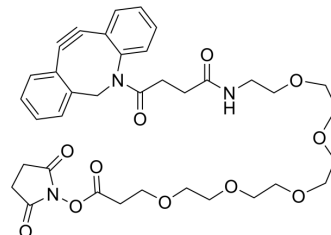


## DBCO-PEG5-NHS ester

|                           |  |
|---------------------------|--|
| <b>Cat. No.:</b>          | HY-126885  |
| <b>CAS No.:</b>           | 2144395-59-3   |
| <b>Molecular Formula:</b> | C <sub>36</sub> H <sub>43</sub> N <sub>3</sub> O <sub>11</sub>   |
| <b>Molecular Weight:</b>  | 693.74   |
| <b>Target:</b>            | ADC Linker; PROTAC Linkers   |
| <b>Pathway:</b>           | Antibody-drug Conjugate/ADC Related; PROTAC  |
| <b>Storage:</b>           | -20°C, sealed storage, away from moisture and light<br>* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light) |



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : ≥ 100 mg/mL (144.15 mM)  
\* "≥" means soluble, but saturation unknown.

| Concentration             | Solvent | Mass      |           |            |
|---------------------------|---------|-----------|-----------|------------|
|                           |         | 1 mg      | 5 mg      | 10 mg      |
| Preparing Stock Solutions | 1 mM    | 1.4415 mL | 7.2073 mL | 14.4146 mL |
|                           | 5 mM    | 0.2883 mL | 1.4415 mL | 2.8829 mL  |
|                           | 10 mM   | 0.1441 mL | 0.7207 mL | 1.4415 mL  |

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

### BIOLOGICAL ACTIVITY

#### Description

DBCO-PEG5-NHS ester is a PEG/Alkyl/ether-based PROTAC linker can be used in the synthesis of PROTACs. DBCO-PEG5-NHS ester is a cleavable ADC linker used in the synthesis of antibody-drug conjugates (ADCs)<sup>[1][2]</sup>. DBCO-PEG5-NHS ester 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<sub>50</sub> & Target

|                  |             |      |
|------------------|-------------|------|
| Cleavable Linker | Alkyl/ether | 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

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[1]. Craig L. Duvall, et al. Conjugation of lipophilic albumin-binding moiety to rna for improved carrier-free in vivo pharmacokinetics and gene silencing. US20180064749A1.

[2]. Samantha M Sarett, et al. Lipophilic siRNA targets albumin in situ and promotes bioavailability, tumor penetration, and carrier-free gene silencing. Proc Natl Acad Sci U S A. 2017 Aug 8;114(32):E6490-E6497.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

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