**Proteins** 

# PBD dimer-2

Cat. No.: HY-148424 CAS No.: 145325-57-1 Molecular Formula:  $C_{31}H_{36}N_4O_6$ Molecular Weight: 560.64

Target: **ADC Cytotoxin** 

Pathway: Antibody-drug Conjugate/ADC Related

Storage: -20°C, protect from light, stored under nitrogen

\* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light, stored under

nitrogen)

**Product** Data Sheet

## **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 130 mg/mL (231.88 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	1.7837 mL	8.9184 mL	17.8368 mL
	5 mM	0.3567 mL	1.7837 mL	3.5674 mL
	10 mM	0.1784 mL	0.8918 mL	1.7837 mL

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

## **BIOLOGICAL ACTIVITY**

Description

PBD dimer-2 (compound 2c) is a C8-linked pyrrolobenzodiazepine dimer. PBD dimer-2 can span an extra base pair and cross-link the 5'-Pu-GA(T/A)TC-Py sequence. PBD dimer-2 can be used as a payload for antibody-agent conjugates (ADCs), and it can be used for the research of  $cancer^{[1][2]}$ .

### **REFERENCES**

[1]. Smellie M, et al. Sequence-selective recognition of duplex DNA through covalent interstrand cross-linking: kinetic and molecular modeling studies with pyrrolobenzodiazepine dimers. Biochemistry. 2003 Jul 15;42(27):8232-9.

[2]. Staben LR, et al. Systematic Variation of Pyrrolobenzodiazepine (PBD)-Dimer Payload Physicochemical Properties Impacts Efficacy and Tolerability of the Corresponding Antibody-Drug Conjugates. J Med Chem. 2020 Sep 10;63(17):9603-9622.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

Tel: 609-228-6898 Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

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

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