**Product** Data Sheet

**Proteins** 

# Inhibitors



## **ANG1005**

Cat. No.: HY-P4073 CAS No.: 1075214-55-9 Molecular Formula:  $\mathsf{C}_{257}\mathsf{H}_{308}\mathsf{N}_{32}\mathsf{O}_{79}$ 

Molecular Weight:

Sequence:

aclitaxel-Lys}-Thr-Glu-Glu-Tyr

 $\{Paclitaxel-T\}FFYGGSRG\{Paclitaxel-K\}RNNF\{Paclitaxel-K\}TEEY$ Sequence Shortening:

Target: Antibody-Drug Conjugates (ADCs) Antibody-drug Conjugate/ADC Related Pathway: Sealed storage, away from moisture Storage:

> Powder -80°C 2 years

-20°C 1 year

\* In solvent: -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)

### **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 100 mg/mL (19.57 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	0.1957 mL	0.9786 mL	1.9572 mL
	5 mM	0.0391 mL	0.1957 mL	0.3914 mL
	10 mM	0.0196 mL	0.0979 mL	0.1957 mL

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

# **BIOLOGICAL ACTIVITY**

Description	ANG1005 (Paclitaxel trevatide) is a brain-penetrating peptide-drug conjugate. ANG1005, a taxane derivative, consists of three paclitaxel (HY-B0015) molecules covalently linked to Angiopep-2, designed to cross the blood-brain and blood-cerebrospinal barriers and to penetrate malignant cells via low density lipoprotein receptor-related protein (LRP1) transport system <sup>[1][2][3]</sup> .
In Vivo	ANG1005 shows significantly improved delivery to brain and brain metastases of breast cancer compared to free paclitaxel (HY-R0015)[1]

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

### **REFERENCES**

- [1]. Thomas FC, et al. Uptake of ANG1005, a novel paclitaxel derivative, through the blood-brain barrier into brain and experimental brain metastases of breast cancer. Pharm Res. 2009 Nov;26(11):2486-94.
- [2]. Li F, et al. Targeting metastatic breast cancer with ANG1005, a novel peptide-paclitaxel conjugate that crosses the blood-brain-barrier (BBB). Genes Dis. 2017 Feb 10;4(1):1-3.
- [3]. Kumthekar P, et al. ANG1005, a Brain-Penetrating Peptide-Drug Conjugate, Shows Activity in Patients with Breast Cancer with Leptomeningeal Carcinomatosis and Recurrent Brain Metastases. Clin Cancer Res. 2020 Jun 15;26(12):2789-2799.

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

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