

## ANG1005

<b>Cat. No.:</b>	HY-P4073
<b>CAS No.:</b>	1075214-55-9
<b>Molecular Formula:</b>	C <sub>256</sub> H <sub>306</sub> N <sub>32</sub> O <sub>81</sub>
<b>Molecular Weight:</b>	5127.33
<b>Sequence:</b>	{Paclitaxel-Thr}-Phe-Phe-Tyr-Gly-Gly-Ser-Arg-Gly-{Paclitaxel-Lys}-Arg-Asn-Asn-Phe-{Paclitaxel-Lys}-Thr-Glu-Glu-Tyr
<b>Sequence Shortening:</b>	{Paclitaxel-T}FFYGGSRG{Paclitaxel-K}RNNF{Paclitaxel-K}TEEY
<b>Target:</b>	Others
<b>Pathway:</b>	Others
<b>Storage:</b>	Sealed storage, away from moisture Powder -80°C 2 years -20°C 1 year

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

# ANG1005

### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 100 mg/mL (19.50 mM; Need ultrasonic)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	0.1950 mL	0.9752 mL	1.9503 mL
5 mM	0.0390 mL	0.1950 mL	0.3901 mL
10 mM	0.0195 mL	0.0975 mL	0.1950 mL

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

### BIOLOGICAL ACTIVITY

#### Description

ANG1005 is a brain-penetrating peptide-agent 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-B0015)<sup>[1]</sup>.

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

### REFERENCES

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[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.

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

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