

## UFP-101 TFA

<b>Cat. No.:</b>	HY-P1299A	
<b>Molecular Formula:</b>	$C_{84}H_{139}F_3N_{32}O_{23}$	
<b>Molecular Weight:</b>	2022.19	
<b>Sequence Shortening:</b>	Bn-GGGFTGARKSARKRKNQ-NH2	Bn-GGGFTGARKSARKRKNQ-NH <sub>2</sub> (TFA salt)
<b>Target:</b>	Opioid Receptor	
<b>Pathway:</b>	GPCR/G Protein; Neuronal Signaling	
<b>Storage:</b>	Sealed storage, away from moisture and light	
	Powder	-80°C 2 years -20°C 1 year
	* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)	

### SOLVENT & SOLUBILITY

#### In Vitro

H<sub>2</sub>O : 130 mg/mL (64.29 mM; Need ultrasonic)

	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	0.4945 mL	2.4726 mL	4.9451 mL
	5 mM	0.0989 mL	0.4945 mL	0.9890 mL
	10 mM	0.0495 mL	0.2473 mL	0.4945 mL

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

### BIOLOGICAL ACTIVITY

#### Description

UFP-101 TFA is a potent, selective, and competitive antagonist of the N/OFQ peptide (NOP) receptor, with a pK<sub>i</sub> of 10.24. UFP-101 TFA displays >3000-fold selectivity over δ, μ and κ opioid receptors. UFP-101 TFA shows antidepressant-like effect<sup>[1]</sup> [2].

#### In Vivo

UFP-101 TFA elicits a pronounced acute and dosedependent antidepressant-like effect in mice submitted to the forced swimming test (FST)<sup>[1]</sup>.  
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

[1]. Calo G, et al. [Nphe<sup>1</sup>,Arg<sup>14</sup>,Lys<sup>15</sup>]nociceptin-NH<sub>2</sub>, a novel potent and selective antagonist of the nociceptin/orphanin FQ receptor. Br J Pharmacol. 2002;136(2):303-311.

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[2]. Gavioli EC, et al. Blockade of nociceptin/orphanin FQ-NOP receptor signalling produces antidepressant-like effects: pharmacological and genetic evidences from the mouse forced swimming test. *Eur J Neurosci.* 2003;17(9):1987-1990.

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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