

UFP-101 TFA

Cat. No.:	HY-P1299A	
Molecular Formula:	$C_{84}H_{139}F_3N_{32}O_{23}$	
Molecular Weight:	2022.19	
Sequence Shortening:	Bn-GGGFTGARKSARKRKNQ-NH ₂	Bn-GGGFTGARKSARKRKNQ-NH ₂ (TFA salt)
Target:	Opioid Receptor	
Pathway:	GPCR/G Protein; Neuronal Signaling	
Storage:	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 ₂ O : 130 mg/mL (64.29 mM; Need ultrasonic)				
		Solvent Concentration	Mass		
	Preparing Stock Solutions		1 mg	5 mg	10 mg
		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.					
In Vivo	1. Add each solvent one by one: PBS Solubility: 100 mg/mL (49.45 mM); Clear solution; Need ultrasonic				

BIOLOGICAL ACTIVITY

Description	UFP-101 TFA is a potent, selective, and competitive antagonist of the N/OFQ peptide (NOP) receptor, with a pK _i of 10.24. UFP-101 TFA displays >3000-fold selectivity over δ, μ and κ opioid receptors. UFP-101 TFA shows antidepressant-like effect ^[1] [2].
In Vivo	UFP-101 TFA elicits a pronounced acute and dosedependent antidepressant-like effect in mice submitted to the forced swimming test (FST) ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Calo G, et al. [Nphe¹,Arg¹⁴,Lys¹⁵]nociceptin-NH₂, a novel potent and selective antagonist of the nociceptin/orphanin FQ receptor. Br J Pharmacol. 2002;136(2):303-311.

[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.

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

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