[(pF)Phe4]Nociceptin(1-13)NH2

Cat. No.:	HY-P1300
CAS No.:	380620-88-2
Molecular Formula:	$C_{61}H_{99}FN_{22}O_{15}$
Molecular Weight:	1399.58
Sequence Shortening:	FGG{Phe(4-F)}TGARKSARK-NH2
Target:	Opioid Receptor
Pathway:	GPCR/G Protein; Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

BIOLOGICAL ACTIVITY

Description	[(pF)Phe4]Nociceptin(1-13)NH2 is a highly potent and selective NOP receptor (OP4) agonist, with a pK_i of 10.68 and a pEC_{50} of 9.31. [(pF)Phe4]Nociceptin(1-13)NH2 displays high selectivity over δ, κ, and μ opioid receptors (>3000 fold)[1][2].
In Vivo	In unanaesthetised normotensive mice, bolus intravenous injection of 100 nmol/kg of [(pF)Phe4]Nociceptin(1-13)NH2 decreases mean blood pressure and heart rate; these effects are longer lasting than those elicited by the same dose of NC(1-13)NH2. I.c.v. administration of [(pF)Phe4]Nociceptin(1-13)NH2 dose-dependently stimulated feeding in rats, and is about tenfold more potent than NC(1-13)NH2[2]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Guerrini R, et al. Structure-activity studies of the Phe(4) residue of nociceptin(1-13)-NH(2): identification of highly potent agonists of the nociceptin/orphanin FQ receptor. J Med Chem. 2001;44(23):3956-3964.

[2]. Rizzi A, et al. Pharmacological characterisation of [(pX)Phe4]nociceptin(1-13)NH2 analogues. 2. In vivo studies. Naunyn Schmiedebergs Arch Pharmacol. 2002;365(6):450-456.

[3]. Bigoni R, et al. Pharmacological characterisation of [(pX)Phe4]nociceptin(1-13)amide analogues. 1. In vitro studies. Naunyn Schmiedebergs Arch Pharmacol. 2002;365(6):442-449.

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