

## [Arg14,Lys15]Nociceptin

Cat. No.:	HY-P1301
CAS No.:	236098-40-1
Molecular Formula:	C <sub>82</sub> H <sub>137</sub> N <sub>31</sub> O <sub>22</sub>
Molecular Weight:	1909.16
Sequence Shortening:	FGGFTGARKSARKRKNQ
Target:	Opioid Receptor
Pathway:	GPCR/G Protein; Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the COA.

### BIOLOGICAL ACTIVITY

<b>Description</b>	[Arg14,Lys15]Nociceptin is a highly potent and selective <b>NOP receptor (ORL1; OP4)</b> agonist, with an EC <sub>50</sub> of 1 nM. [Arg14,Lys15]Nociceptin displays high selectivity over opioid receptors, with IC <sub>50</sub> s of 0.32, 280, >10000 and 1500 nM for NOP, μ, δ and κ receptors, respectively <sup>[1]</sup> .
<b>In Vitro</b>	[Arg14,Lys15]Nociceptin is about 30-fold more potent than Nociceptin (NC) and produces longer lasting effects <sup>[2]</sup> .
<b>In Vivo</b>	In in vivo experiments, [Arg14,Lys15]Nociceptin mimics the effects of NC, producing, after intracerebroventricular administration, pronociceptive effects in the tail-withdrawal assay and inhibiting the locomotor activity of the mice <sup>[2]</sup> .

### REFERENCES

[1]. Okada K, Sujaku T, Chuman Y, et al. Highly potent nociceptin analog containing the Arg-Lys triple repeat. *Biochem Biophys Res Commun.* 2000;278(2):493-498.

[2]. Rizzi D, Rizzi A, Bigoni R, et al. [Arg(14),Lys(15)]nociceptin, a highly potent agonist of the nociceptin/orphanin FQ receptor: in vitro and in vivo studies. *J Pharmacol Exp Ther.* 2002;300(1):57-63.

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

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