



LKT Laboratories, Inc.

Nociceptin

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Product Information

Product ID N5210
CAS No. 170713-75-4
Chemical Name Orphanin FQ

Synonym

Formula C₇₉H₁₂₉N₂₇O₂₂
Formula Wt. 1809.1
Melting Point
Purity ≥98%
Solubility Soluble in water, acid.

Store Temp -20°C
Ship Temp Ambient

Description Nociceptin is an endogenous neuropeptide that binds the nociceptin (NOP) receptor, considered the 'fourth' opioid receptor subtype. Nociceptin displays anti-opioid activity, modulating nociception and exhibiting anti-analgesic properties in vivo. In the amygdala, nociceptin displays neuromodulatory activity, decreasing glutamate release. Additionally, nociceptin inhibits the activity of POMC neurons and modulates GIRK channel signaling, altering animal mating behavior.

Phe-Gly-Gly-Phe-Thr-Gly-Ala-Arg-Lys-Ser-Ala-Arg-Lys-Leu-Ala-Asn-Gln

Bulk quantities available upon request

Product ID	Size
N5210	1 mg
N5210	2.5 mg
N5210	5 mg

- References** Borgquist A, Rivas VM, Kachani M, et al. Gonadal Steroids Differentially Modulate the Actions of Orphanin FQ/Nociceptin at A Physiologically Relevant Circuit Controlling Female Sexual Receptivity. *J Neuroendocrinol.* 2014 May;26(5):329-40. PMID: 24617903.
- Kallupi M, Varodayan FP, Oleata CS, et al. Nociceptin/orphanin FQ decreases glutamate transmission and blocks ethanol-induced effects in the central amygdala of naive and ethanol-dependent rats. *Neuropsychopharmacology.* 2014 Apr;39(5):1081-92. PMID: 24169802.
- Okuda-Ashitaka E, Minami T, Tachibana S, et al. Nocistatin, a peptide that blocks nociceptin action in pain transmission. *Nature.* 1998 Mar 19;392(6673):286-9. PMID: 9521323.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.