



Product Information

Product ID N1989

CAS No. 39379-15-2

Chemical Name

Synonym

Formula C₇₈H₁₂₂N₂₁O₂₀

Formula Wt. 1672.9

Melting Point

Purity ≥95%

Solubility Soluble in water (0.7 mg/mL).

Store Temp -20°C

Ship Temp Ambient

Description Neurotensin is an endogenous tridecapeptide that exhibits antinociceptive, pro-inflammatory, and gastrointestinal motility modulating activities; it binds and activates neurotensin (NTS) receptors. Neurotensin induces contractions in smooth muscle cells, playing a role in regulating digestive activity in vitro and in vivo. Additionally, neurotensin induces intracellular Ca²⁺ release, activating non-selective cation channels and altering pacemaker currents involved in gastrointestinal and colonic motility. In animal models, neurotensin displays sympatho-inhibitory activity, decreases blood pressure and heart rate. Neurotensin exerts its actions through activation of neurotensin receptors; activation of these receptors also stimulates orexin neurons, suggesting a role for neurotensin in mediation of reward, feeding, and wakefulness.

pGlu-Leu-Tyr-Glu-Asn-Lys-Pro-Arg-Arg-Pro-Tyr-Ile-Leu

Bulk quantities available upon request

Product ID	Size
N1989	1 mg
N1989	2 mg
N1989	5 mg

References Kleczkowska P, Lipkowski AW. Neurotensin and neurotensin receptors: characteristic, structure-activity relationship and pain modulation--a review. *Eur J Pharmacol.* 2013 Sep 15;716(1-3):54-60. PMID: 23500196.

Degolier TF, Brown DR, Duke GE, et al. Neurotensin and cholecystokinin contract gallbladder circular muscle in chickens. *Poult Sci.* 2013 Aug;92(8):2156-62. PMID: 23873564.

Furutani N, Hondo M, Kageyama H, et al. Neurotensin co-expressed in orexin-producing neurons in the lateral hypothalamus plays an important role in regulation of sleep/wakefulness states. *PLoS One.* 2013 Apr 19;8(4):e62391. PMID: 23620827.

Lee J, Kim YD, Park CG, et al. Neurotensin modulates pacemaker activity in interstitial cells of Cajal from the mouse small intestine. *Mol Cells.* 2012 May;33(5):509-16. PMID: 22441675.

Zogovic B, Pilowsky PM. Intrathecal neurotensin is hypotensive, sympathoinhibitory and enhances the baroreflex in anesthetized rat. *Br J Pharmacol.* 2012 May;166(1):378-89. PMID: 22035146.

Law IK, Murphy JE, Bakirtzi K, et al. Neurotensin-induced proinflammatory signaling in human colonocytes is regulated by B-arrestins and endothelin-converting enzyme-1-dependent endocytosis and resensitization of neurotensin receptor 1. *J Biol Chem.* 2012 Apr 27;287(18):15066-75. PMID: 22416137.

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