

PRODUCT INFORMATION



Neurotensin (trifluoroacetate salt)

Item No. 24717

CAS Registry No.: 39379-15-2
MF: $C_{78}H_{121}N_{21}O_{20} \cdot XCF_3COOH$
FW: 1,672.9
Purity: $\geq 95\%$
Supplied as: A lyophilized powder
Storage: $-20^\circ C$
Stability: ≥ 4 years

Glp—Leu—Tyr—Glu—Asn—Lys—Pro—Arg—Arg—Pro—Tyr—Ile—Leu—OH
 $\cdot XCF_3COOH$

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Neurotensin (trifluoroacetate salt) is supplied as a lyophilized powder. A stock solution may be made by dissolving the neurotensin (trifluoroacetate salt) in water. The solubility of neurotensin (trifluoroacetate salt) in water is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Neurotensin is a neuropeptide that is distributed throughout the CNS and in enteroendocrine cells of the small intestine that has diverse biological activities.¹⁻⁴ *In vivo*, neurotensin (10-50 μg per hour, i.c.v.) induces hypothermia in rats.² Neurotensin signaling is increased and induces analgesia in wild-type mice, and neurotensin knockout mice are defective in basal nociceptive and stress-induced analgesic responses in a cold water swim stress test.³ It acts as an indirect dopamine antagonist that inhibits dopamine-induced effects at pre- and postsynaptic dopamine receptors.⁴ Neurotensin inhibits small bowel motility and secretion of gastric acid, stimulates pancreatic and biliary secretion, increases fatty acid absorption, and stimulates growth of the stomach, colon, pancreas, and small bowel in rats.¹ It also increases growth of breast, pancreatic, and hepatocellular carcinoma cells via induction of IL-8 secretion and activation of epithelial mesenchymal transition (EMT) *in vitro* and *in vivo*.

References

1. Ye, T., Liu, P., Wang, Y., et al. *Int. Rev. Immunol.* **35**(4), 340-350 (2016).
2. Popp, E., Schneider, A., Vogel, P., et al. *Neuropeptides* **41**(5), 349-354 (2007).
3. Dobner, P.R. *Peptides* **27**(10), 2405-2414 (2006).
4. Kitabgi, P. *Neurochem Int.* **14**(2), 111-119 (1989).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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