

PRODUCT INFORMATION



Neuromedin S (rat) (trifluoroacetate salt)

Item No. 24547

CAS Registry No.: 843782-19-4

Formal Name: L-leucyl-L-prolyl-L-arginyl-L-leucyl-L-leucyl-L-histidyl-L-threonyl-L- α -aspartyl-L-seryl-L-arginyl-L-methionyl-L-alanyl-L-threonyl-L-isoleucyl-L- α -aspartyl-L-phenylalanyl-L-prolyl-L-lysyl-L-lysyl-L- α -aspartyl-L-prolyl-L-threonyl-L-threonyl-L-seryl-L-leucylglycyl-L-arginyl-L-prolyl-L-phenylalanyl-L-phenylalanyl-L-leucyl-L-phenylalanyl-L-arginyl-L-prolyl-L-arginyl-L-aspartamide, trifluoroacetate salt

H—Leu—Pro—Arg—Leu—Leu—His—Thr—Asp—Ser—Arg—Met—Ala—Thr—Ile—Asp—Phe—Pro—Lys—Lys—Asp—Pro—Thr—Thr—Ser—Leu—Gly—Arg—Pro—Phe—Phe—Leu—Phe—Arg—Pro—Arg—Asn—NH₂

Synonym: NMS

MF: C₁₉₃H₃₀₇N₅₇O₄₉S • XCF₃COOH

FW: 4,242.0

Purity: ≥95%

Supplied as: A lyophilized powder

Storage: -20°C

Stability: ≥4 years

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

Laboratory Procedures

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

Description

Neuromedin S is a neuropeptide agonist of the neuromedin U (NMU) receptors that increases calcium concentrations in CHO cells overexpressing NMU₁ and NMU₂ (EC₅₀s = 65 and 91 pM, respectively).¹ Neuromedin S (1 nmol, i.c.v.) induces phase shifts in the circadian rhythm of locomotor activity in rats without altering the circadian period length.¹ It also suppresses food and water intake in a dose-dependent manner when administered to rats during the dark period at doses ranging from 0.1 to 5 nmol.² Co-administration of neuromedin S (1 nmol, i.c.v.) inhibits the ability of neuropeptide Y (Item Nos. 15071 | 24716), ghrelin (Item No. 24458), and agouti-related protein (ARP) to stimulate food intake in rats by greater than 50%. Neuromedin S (0.2 nmol, i.c.v.) increases vasopressin levels in rat plasma within five minutes to levels five times greater than a saline control and decreases urinary volume by 25% during the dark period.³

References

1. Mori, K., Miyazato, M., Ida, T., *et al.* Identification of neuromedin S and its possible role in the mammalian circadian oscillator system. *EMBO J.* **24**(2), 325-335 (2005).
2. Ida, T., Mori, K., Miyazato, M., *et al.* Neuromedin S is a novel anorexigenic hormone. *Endocrinology* **146**(10), 4217-4223 (2005).
3. Sakamoto, T., Mori, K., Nakahara, K., *et al.* Neuromedin S exerts an antidiuretic action in rats. *Biochem. Bioph. Res. Commun.* **361**(2), 457-461 (2007).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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