

Product Data Sheet

Product Name: Urocortin II (mouse) (trifluoroacetate salt)

Cat. No.: GC45588

Chemical Properties

Cas. No.

Formula C187H320N56O50.XCF3COOH M.Wt 4152.9

Solubility Water: 1 mg/ml Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available size: ship with RT, or blue ice upon request.

Structure

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H-Val-Ile-Leu-Ser-Leu-Asp-Val-Pro-Ile-Gly-
Leu-Leu-Arg-Ile-Leu-Leu-Glu-Gln-Ala-Arg-
Tyr-Lys-Ala-Ala-Arg-Asn-Gln-Ala-Ala-Thr-
Asn-Ala-Gln-Ile-Leu-Ala-His-Val-NH2
• XCF3COOH
  
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Background

Urocortin II is a neuropeptide hormone and member of the corticotropin-releasing factor (CRF) family which includes mammalian CRF, urocortin, urocortin III, frog sauvagine, and piscine urotensin I.1 Mouse urocortin II shares 34 and 42% sequence homology with rat CRF and urocortin. It is expressed in mouse paraventricular, supraoptic, and arcuate nuclei of the hypothalamus, the locus coeruleus, and in motor nuclei of the brainstem and spinal ventral horn. Urocortin II selectively binds to CRF1 over CRF2 receptors ($K_{is} = 0.66$ and >100 nM, respectively) and induces cAMP production in CHO cells expressing CRF2 ($EC_{50} = 0.14$ nM). In vivo, urocortin II suppresses nighttime food intake by 35% in rats when administered intracerebroventricularly at a dose of 1 µg. Urocortin II (0.1 and 0.5 µg, i.c.v) stimulates fecal pellet output, increases distal colonic transit, and inhibits gastric emptying in mice.2

References

1. Reyes, T.M., Lewis, K., Perrin, M.H., et al. Urocortin II: A member of the corticotropin-releasing factor (CRF) neuropeptide family that is selectively bound by type 2 CRF receptors. *Proc. Natl. Acad. Sci. U.S.A.* 98(5), 2843-2848 (2001).

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

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2. Martinez, V., Wang, L., Million, M., et al. Urocortins and the regulation of gastrointestinal motor function and visceral pain. *Peptides* 25(10), 1733-1744 (2004).

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