

# PRODUCT INFORMATION



## Urocortin II (mouse) (trifluoroacetate salt)

Item No. 24747

**Formal Name:** L-valyl-L-isoleucyl-L-leucyl-L-seryl-L-leucyl-L- $\alpha$ -aspartyl-L-valyl-L-prolyl-L-isoleucylglycyl-L-leucyl-L-leucyl-L-arginyl-L-isoleucyl-L-leucyl-L-leucyl-L- $\alpha$ -glutamyl-L-glutamyl-L-alanyl-L-arginyl-L-tyrosyl-L-lysyl-L-alanyl-L-alanyl-L-arginyl-L-asparaginyl-L-glutamyl-L-alanyl-L-alanyl-L-threonyl-L-asparaginyl-L-alanyl-L-glutamyl-L-isoleucyl-L-leucyl-L-alanyl-L-histidyl-L-valinamide, trifluoroacetate salt



**MF:**  $\text{C}_{187}\text{H}_{320}\text{N}_{56}\text{O}_{50} \bullet \text{XCF}_3\text{COOH}$

**FW:** 4,152.9

**Purity:**  $\geq 95\%$

**Supplied as:** A lyophilized powder

**Storage:**  $-20^\circ\text{C}$

**Stability:**  $\geq 4$  years

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

### Laboratory Procedures

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

### Description

Urocortin II is a neuropeptide hormone and member of the corticotropin-releasing factor (CRF) family which includes mammalian CRF, urocortin (Item No. 24744), urocortin III (Item Nos. 24748 | 24749 | 24750), frog sauvagine, and piscine urotensin I.<sup>1</sup> Mouse urocortin II shares 34 and 42% sequence homology with rat CRF and urocortin (Item No. 24745). 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 CRF<sub>1</sub> over CRF<sub>2</sub> receptors ( $K_{iS} = 0.66$  and  $>100$  nM, respectively) and induces cAMP production in CHO cells expressing CRF2 ( $\text{EC}_{50} = 0.14$  nM). *In vivo*, urocortin II suppresses nighttime food intake by 35% in rats when administered intracerebroventricularly at a dose of 1  $\mu\text{g}$ . Urocortin II (0.1 and 0.5  $\mu\text{g}$ , i.c.v) stimulates fecal pellet output, increases distal colonic transit, and inhibits gastric emptying in mice.<sup>2</sup>

### 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).
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).

#### 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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