

PRODUCT INFORMATION



Urotensin I (white sucker) (trifluoroacetate salt)

Item No. 24752

Formal Name: L-asparaginy-L- α -aspartyl-L- α -aspartyl-L-prolyl-L-prolyl-L-isoleucyl-L-seryl-L-isoleucyl-L- α -aspartyl-L-leucyl-L-threonyl-L-phenylalanyl-L-histidyl-L-leucyl-L-leucyl-L-arginyl-L-asparaginy-L-methionyl-L-isoleucyl-L- α -glutamyl-L-methionyl-L-alanyl-L-arginyl-L-isoleucyl-L- α -glutamyl-L-asparaginy-L- α -glutamyl-L-arginyl-L- α -glutamyl-L-glutamyl-L-alanylglycyl-L-leucyl-L-asparaginy-L-arginyl-L-lysyl-L-tyrosyl-L-leucyl-L- α -aspartyl-L- α -glutamyl-L-valinamide, trifluoroacetate salt



MF: $\text{C}_{210}\text{H}_{340}\text{N}_{62}\text{O}_{67}\text{S}_2 \bullet \text{XCF}_3\text{COOH}$

FW: 4,869.5

Purity: $\geq 95\%$

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

Urotensin I (white sucker) (trifluoroacetate salt) is supplied as a lyophilized powder. A stock solution may be made by dissolving the urotensin I (white sucker) (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. Urotensin I (white sucker) (trifluoroacetate salt) is soluble in the organic solvent formic acid at a concentration of approximately 1 mg/ml.

Description

Urotensin I is a peptide agonist of corticotropin-releasing factor receptor 1 (CRF₁) and CRF₂ and is involved in the regulation of cortisol and stress responses in teleost fish.¹ It is expressed in the urophysis or the brain in teleost fish and has also been found in elasmobranchii fish.² It induces cAMP production in HEK293 cells expressing human CRF₁ or CRF_{2a} (EC₅₀s = 0.52 and 0.6 nM, respectively) or *Xenopus* CRF₁ or CRF₂ (EC₅₀s = 0.78 and 0.46 nM, respectively).³ Urotensin I stimulates thyroid stimulating hormone (TSH) release in primary coho salmon pituitary cells when used at concentrations ranging from 0.01 to 100 nM.⁴ The expression of urotensin I increases in the preoptic area and urophysis of rainbow trout in response to isolation and hyperammonia stress, respectively, and correlates with plasma cortisol levels in masu salmon.^{5,6} Urotensin I suppresses food intake in rainbow trout (ED₅₀ = 17.4 ng/g).⁷

References

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3. Dautzenberg, F.M., Py-Lang, G., Higelin, J., et al. *J. Pharmacol. Exp. Ther.* **296**(1), 113-120 (2001).
4. Larsen, D.A., Swanson, P., Dickey, J.T., et al. **109**(2), 276-285 (1998).
5. Bernier, N.J., Alderman, S.L., and Bristow, E.N. *J. Endocrinol.* **196**(3), 637-648 (2008).
6. C.G., W., Ando, H., Kitahashi, T., et al. *Gen. Comp. Endocrinol.* **155**(1), 126-140 (2008).
7. Ortega, V.A., Lovejoy, D.A., and Bernier, N.J. *Front. Neurosci.* **7**:196 (2013).

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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