

PRODUCT INFORMATION



Bombesin (trifluoroacetate salt)

Item No. 24151

Formal Name: 5-oxo-L-prolyl-L-glutaminy-L-arginyl-L-leucylglycyl-L-asparaginy-L-glutaminy-L-tryptophyl-L-alanyl-L-valylglycyl-L-histidyl-L-leucyl-L-methioninamide, trifluoroacetate salt

Synonym: Glp-Gln-Arg-Leu-Gly-Asn-Gln-Trp-Ala-Val-Gly-His-Leu-Met-NH₂

MF: C₇₁H₁₁₀N₂₄O₁₈S • XCF₃COOH

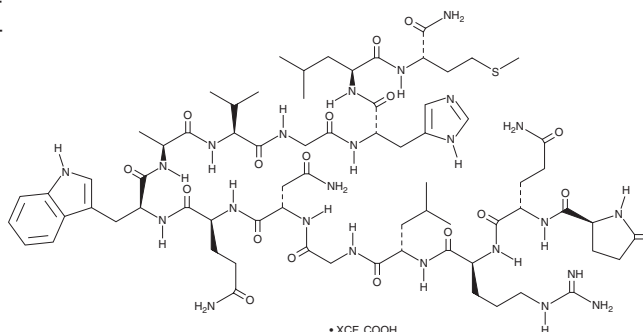
FW: 1,619.9

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

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

Description

Bombesin is a neuropeptide with diverse biological activities originally isolated from the skin of *B. bombina* and *B. variegata* amphibians.^{1,2} It binds to the gastrin-releasing peptide receptor (GRPR) in rat pancreatic acinar cells ($K_i = 1.88$ nM) and to frog bombesin receptor subtype 4 (BB₄) in CHO cells overexpressing the receptor ($K_i = 1.7$ nM).³ Hypothalamic paraventricular microinfusion of bombesin (100 ng per animal) increases blood glucose, free fatty acids, and corticosterone levels in rats.⁴ Bombesin (50 ng per animal) injection into the preoptic area decreases food intake by food-deprived or insulin pretreated rats.⁵ It delays gastric emptying in rats by 55.8% when administered at a dose of 16 µg/kg (i.p.) and inhibits gastric secretion at a dose of 500 ng per animal.^{6,7}

References

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2. Weber, H.C. *Curr. Opin. Endocrinol. Diabetes Obes.* **16**(1), 66-71 (2009).
3. Pradhan, T.K., Katsuno, T., Taylor, J.E., et al. *Eur. J. Pharmacol.* **343**(2-3), 275-287 (1998).
4. Gunion, M.W., Taché, Y., Rosenthal, M.J., et al. *Brain Res.* **478**(1), 47-58 (1989).
5. Babcock, A.M., Barton, C., Gunion, M.W., et al. *Physiol. Behav.* **51**(5), 933-938 (1992).
6. Scarpignato, C. and Bertaccini, G. *Digestion* **21**(2), 104-106 (1981).
7. Taché, Y., Lesige, D., and Goto, Y. *Dig. Dis. Sci.* **31**(4), 412-417 (1986).

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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