

PRODUCT INFORMATION



Ghrelin (rat) (acetyl) (trifluoroacetate salt)

Item No. 24982

Formal Name: glycyl-L-seryl-O-acetyl-L-seryl-L-phenylalanyl-L-leucyl-L-seryl-L-prolyl-L- α -glutamyl-L-histidyl-L-glutamyl-L-lysyl-L-alanyl-L-glutamyl-L-glutamyl-L-arginyl-L-lysyl-L- α -glutamyl-L-seryl-L-lysyl-L-lysyl-L-prolyl-L-prolyl-L-alanyl-L-lysyl-L-leucyl-L-glutamyl-L-prolyl-L-arginine, trifluoroacetate salt



• XCF₃COOH

MF: C₁₄₁H₂₃₃N₄₅O₄₂ • XCF₃COOH

FW: 3,230.6

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

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

Description

Ghrelin is an endogenous gastrointestinal hormone and neuropeptide that binds to the growth hormone (GH) secretagogue receptor (GHS-R).^{1,2} Ghrelin requires an n-octanoyl modification at serine 3 for binding to the GH secretagogue receptor (GHS-R).³ Ghrelin (rat) (acetyl) is form of ghrelin that is acetylated at serine 3. Acetylated ghrelin is 20-fold less potent than n-octanoyl ghrelin in HEK-293 cells transfected with human GHS-R (IC₅₀ = >2,000 nM; EC₅₀ = 2,000 nM in an aequorin bioluminescence assay).⁴

References

1. Kojima, M., Hosoda, H., Date, Y., *et al.* Ghrelin is a growth-hormone-releasing acylated peptide from stomach. *Nature* **402(6762)**, 656-660 (1999).
2. Dickson, S.L., Egecioglu, E., Landgren, S., *et al.* The role of the central ghrelin system in reward from food and chemical drugs. *Mol. Cell Endocrinol.* **340(1)**, 80-87 (2011).
3. Resh, M.D. Fatty acylation of proteins: The long and the short of it. *Prog. Lipid Res.* **63**, 120-131 (2016).
4. Bednarek, M.A., Feighner, S.D., Pong, S.-S., *et al.* Structure-function studies on the new growth hormone-releasing peptide, ghrelin: Minimal sequence of ghrelin necessary for activation of growth hormone secretagogue receptor 1a. *J. Med. Chem.* **43(23)**, 4370-4376 (2000).

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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