# PRODUCT INFORMATION



# Obestatin (rat) (trifluoroacetate salt)

Item No. 24553

Formal Name: L-phenylalanyl-L-asparaginyl-L-alanyl-L-prolyl-

> L-phenylalanyl-L-α-aspartyl-L-valylglycyl-Lisoleucyl-L-lysyl-L-leucyl-L-serylglycyl-L-alanyl-Lglutaminyl-L-tyrosyl-L-glutaminyl-L-glutaminyl-

L-histidylglycyl-L-arginyl-L-alanyl-L-leucinamide,

trifluoroacetate salt

MF:  $C_{114}H_{174}N_{34}O_{31} \bullet XCF_3COOH$ 

FW: 2,516.8 **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** 

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

## Description

Obestatin is a 23-amino acid peptide hormone that is formed by cleavage of the ghrelin and obestatin prepropeptide. It is secreted by rat stomach, brain, perinatal pancreas, myenteric plexus, Leydig cells, and gastrointestinal mucosa and levels are decreased in rat plasma in response to fasting. Total obestatin levels are also reduced in rat fundus and intestine following treadmill exercise training.<sup>2</sup> Obestatin inhibits release of insulin, somatostatin, and pancreatic polypeptide and stimulates glucagon release from mouse and rat pancreatic islets in vitro in a concentration-dependent manner.<sup>3</sup> In vivo, obestatin (320 μg/kg) reduces food intake without affecting growth hormone or corticosterone release in mice. 4 It also inhibits water intake and dehydration-induced vasopressin secretion in response to a hypovolemic challenge in rats.<sup>5</sup>

### References

- 1. Mészárosová, M., Sirotkin, A.V., Grossmann, R., et al. The effect of obestatin on porcine ovarian granulosa cells. Anim. Reprod. Sci. 108(1-2), 196-207 (2008).
- Ghanbari-Niaki, A., Jafari, A., Abednazari, H., et al. Treadmill exercise reduces obestatin concentrations in rat fundus and small intestine. Biochem. Biophys. Res. Commun. 372(4), 741-745 (2008).
- Qader, S.S., Håkanson, R., Rehfeld, J.F., et al. Proghrelin-derived peptides influence the secretion of insulin, glucagon, pancreatic polypeptide and somatostatin: A study on isolated islets from mouse and rat pancreas. Regul. Pept. 146(1-3), 230-237 (2008).
- Bresciani, E., Rapetti, D., Donà, F., et al. Obestatin inhibits feeding but does not modulate GH and corticosterone secretion in the rat. J. Endocrinol. Invest. 29(8), RC16-RC8 (2006).
- 5. Samson, W.K., Yosten, G.L., Chang, J.K., et al. Obestatin inhibits vasopressin secretion: Evidence for a physiological action in the control of fluid homeostasis. J. Endocrinol. 196(3), 559-564 (2008).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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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H-Phe-Asn-Ala-Pro-Phe-Asp-Val-Gly-Ile-Lys-

Leu-Ser-Gly-Ala-Gln-Tyr-Gln-Gln-His-Gly-

Arg - Ala - Leu - NH<sub>2</sub>

• XCF<sub>3</sub>COOH

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