

# PRODUCT INFORMATION



## Obestatin (human) (trifluoroacetate salt)

Item No. 24552

**Formal Name:** L-phenylalanyl-L-asparaginy-L-alanyl-L-prolyl-L-phenylalanyl-L- $\alpha$ -aspartyl-L-valylglycyl-L-isoleucyl-L-lysyl-L-leucyl-L-serylglycyl-L-valyl-L-glutaminy-L-tyrosyl-L-glutaminy-L-glutaminy-L-histidyl-L-seryl-L-glutaminy-L-alanyl-L-leucinamide, trifluoroacetate salt  
H—Phe—Asn—Ala—Pro—Phe—Asp—Val—Gly—Ile—Lys—Leu—Ser—Gly—Val—Gln—Tyr—Gln—Gln—His—Ser—Gln—Ala—Leu—NH<sub>2</sub>  
• XCF<sub>3</sub>COOH

**MF:** C<sub>116</sub>H<sub>176</sub>N<sub>32</sub>O<sub>33</sub> • XCF<sub>3</sub>COOH

**FW:** 2,546.8

**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 (human) (trifluoroacetate salt) is supplied as a lyophilized powder. A stock solution may be made by dissolving the obestatin (human) (trifluoroacetate salt) in water. The solubility of obestatin (human) (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 with a conserved C-terminal glycine residue and amidation site that is formed by cleavage of the ghrelin and obestatin prepropeptide.<sup>1</sup> It binds to the orphan receptor GPR39 (K<sub>d</sub> = 1 nM) and stimulates cAMP production in CHO and HEK293 cells overexpressing human GPR39. Obestatin inhibits contraction of isolated mouse jejunum muscle strips induced by ghrelin (Item Nos. 15072 | 24458). *In vivo*, obestatin (12.5-1,000 nmol/kg) suppresses food intake in a time- and dose-dependent manner and reduces body weight gain and gastric emptying in mice. Obestatin (0.22 g per animal) also reduces food intake and glucose response without affecting plasma insulin responses in fasted high-fat diet fed mice.<sup>2</sup>

### References

1. Zhang, J.V., Ren, P.C., Avsian-Kretchmer, O., *et al.* Obestatin, a peptide encoded by the ghrelin gene, opposes ghrelin's effects on food intake. *Science* **310**(5750), 996-999 (2005).
2. Subasinghage, A.P., Green, B.D., Flatt, P.R., *et al.* Metabolic and structural properties of human obestatin {1-23} and two fragment peptides. *Peptides* **31**(9), 1697-1705 (2010).

#### 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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