

PRODUCT INFORMATION



Oxyntomodulin (bovine, porcine) (trifluoroacetate salt)

Item No. 25005

Formal Name: L-histidyl-L-seryl-L-glutaminyglycyl-L-threonyl-L-phenylalanyl-L-threonyl-L-seryl-L- α -aspartyl-L-tyrosyl-L-seryl-L-lysyl-L-tyrosyl-L-leucyl-L- α -aspartyl-L-seryl-L-arginyl-L-arginyl-L-alanyl-L-glutaminy-L- α -aspartyl-L-phenylalanyl-L-valyl-L-glutaminy-L-tryptophyl-L-leucyl-L-methionyl-L-asparaginy-L-threonyl-L-lysyl-L-arginyl-L-asparaginy-L-lysyl-L-asparaginy-L-asparaginy-L-
H—His—Ser—Gln—Gly—Thr—Phe—Thr—Ser—Asp—Tyr—
Ser—Lys—Tyr—Leu—Asp—Ser—Arg—Arg—Ala—Gln—
Asp—Phe—Val—Gln—Trp—Leu—Met—Asn—Thr—Lys—
Arg—Asn—Lys—Asn—Asn—Ile—Ala—OH
Synonym: Glucagon-37 (bovine, porcine)
MF: $C_{192}H_{295}N_{59}O_{60}S \cdot XCF_3COOH$
FW: 4,421.8
Purity: $\geq 95\%$
Supplied as: A lyophilized powder
Storage: $-20^\circ C$
Stability: ≥ 4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

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

Description

Oxyntomodulin, also known as glucagon-37, is a 37-amino acid peptide produced in bovine and porcine gut.^{1,2} It reduces [^{125}I]-glucagon binding to rat liver plasma membranes and a glucagon antibody in a concentration-dependent manner.¹ Oxyntomodulin induces insulin secretion in a glucose- and concentration-dependent manner in perfused rat pancreas.³ It increases glucose absorption in isolated rat small intestine and enterocytes.⁴ *In vivo*, oxyntomodulin (25-450 pmol/kg) inhibits pentagastrin-stimulated gastric acid secretion in a dose-dependent manner in rats.⁵ It also increases plasma concentrations of insulin and glucose in Holstein cattle under normal physiological conditions.²

References

1. Bataille, D., Coudray, A.M., Carlqvist, M., *et al.* Isolation of glucagon-37 (bioactive enteroglucagon/oxyntomodulin) from porcine jejunum-ileum: Isolation of the peptide. *FEBS Lett.* **146(1)**, 73-78 (1982).
2. ThanThan, S., Zhao, H., Yannaing, S., *et al.* Oxyntomodulin increases the concentrations of insulin and glucose in plasma but does not affect ghrelin secretion in Holstein cattle under normal physiological conditions. *Domest. Anim. Endocrinol.* **39(3)**, 163-170 (2010).
3. Jarrousse, C., Bataille, D., and Jeanrenaud, B. A pure enteroglucagon, oxyntomodulin (glucagon 37), stimulates insulin release in perfused rat pancreas. *Endocrinology* **115(1)**, 102-105 (1984).
4. Stümpel, F., Scholtka, B., and Jungermann, K. A new role for enteric glucagon-37: Acute stimulation of glucose absorption in rat small intestine. *FEBS Lett.* **410(2-3)**, 515-519 (1997).
5. Jarrousse, C., Audoussat-Puech, M.P., Dubrasquet, M., *et al.* Oxyntomodulin (glucagon-37) and its C-terminal octapeptide inhibit gastric acid secretion. *FEBS Lett.* **188(1)**, 81-84 (1985).

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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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM