

PRODUCT INFORMATION



Sermorelin (acetate)

Item No. 36696

CAS Registry No.: 516482-86-3

Formal Name: 29-L-argininamide-1-29-somatoliberin
(human pancreatic islet), acetate

Synonyms: Growth Hormone-releasing Factor (1-29) amide, hGH-RH(1-29)-NH₂, hGRF(1-29)NH₂, hpGRF(1-29)NH₂, Somatotropin Releasing-Hormone (1-29) amide

H—Tyr—Ala—Asp—Ala—Ile—Phe—Thr—Asn—Ser—Tyr—

Arg—Lys—Val—Leu—Gly—Gln—Leu—Ser—Ala—Arg—

Lys—Leu—Leu—Gln—Asp—Ile—Met—Ser—Arg—NH₂

MF: C₁₄₉H₂₄₆N₄₄O₄₂S • XC₂H₄O₂

FW: 3,357.9

• XCH₃CO₂H

Purity: ≥95%

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years

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

Laboratory Procedures

Sermorelin (acetate) is supplied as a solid. A stock solution may be made by dissolving the sermorelin (acetate) in water. The solubility of sermorelin (acetate) in water is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Sermorelin is a 29-residue N-terminal analog of growth hormone-releasing hormone (GHRH) that retains the ability to stimulate growth hormone (GH) release.¹ Sermorelin (1 µg/kg, i.v.) increases serum GH levels in rats by approximately 17% compared with saline control after 15 minutes.² It also increases GH release in pigs when administered at a dose of 250 ng/kg.³ Sermorelin (1 µM) increases proliferation of NCI-H727 human bronchial carcinoma cells by 30% and increases vascular endothelial growth factor (VEGF) secretion.⁴ It increases phosphorylation of focal adhesion kinase (FAK) and expression of VEGF in A549 lung cancer cells when used at a concentration of 0.1 µM.⁵ Formulations containing sermorelin have been used to diagnose and treat growth hormone deficiency.

References

1. Rivier, J., Spiess, J., Thorner, M., *et al.* Characterization of a growth hormone-releasing factor from a human pancreatic islet tumour. *Nature* **300(5889)**, 276-278 (1982).
2. Izdebski, J., Pinski, J., Horvath, J.E., *et al.* Synthesis and biological evaluation of superactive agonists of growth hormone-releasing hormone. *Proc. Natl. Acad. Sci. USA* **92(11)**, 4872-4876 (1995).
3. Lance, V.A., Murphy, W.A., Sueiras-Diaz, J., *et al.* Super-active analogs of growth hormone-releasing factor (1-29)-amide. *Biochem. Biophys. Res. Commun.* **119(1)**, 265-272 (1984).
4. Stepień, T., Sacewicz, M., Lawnicka, H., *et al.* Stimulatory effect of growth hormone-releasing hormone (GHRH(1-29)NH₂) on the proliferation, VEGF and chromogranin A secretion by human neuroendocrine tumor cell line NCI-H727 *in vitro*. *Neuropeptides* **43(5)**, 397-400 (2009).
5. Siejka, A., Barabutis, N., and Schally, A.V. GHRH antagonist inhibits focal adhesion kinase (FAK) and decreases expression of vascular endothelial growth factor (VEGF) in human lung cancer cells *in vitro*. *Peptides* **37(1)**, 63-68 (2012).

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.

WARRANTY AND LIMITATION OF REMEDY

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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