

32-2025: GHRH Recombinant Protein

Alternative Name : Somatoliberin, Growth hormone-releasing factor, GRF, Growth hormone-releasing hormone, GHRH, Somatocrinin, Somatorelin, Sermorelin, GHRF, MGC119781.

Description

Source : Growth Hormone Releasing Hormone Human Synthetic is a single, non-glycosylated, polypeptide chain containing 29 amino acids and having a molecular mass of 3358.9 Dalton. Corresponds to the amino-terminal segment of the naturally occurring human growth hormone-releasing hormone consisting of 44 amino acid residues. The GHRH is purified by proprietary chromatographic techniques. Growth-hormone-releasing hormone (GHRH), also known as growth-hormone-releasing factor (GRF or GHRF) or somatocrinin, is a 44-amino acid peptide hormone produced in the arcuate nucleus of the hypothalamus. GHRH is released from neurosecretory nerve terminals of these arcuate neurons, and is carried by the hypothalamo-hypophysial portal circulation to the anterior pituitary gland where it stimulates growth hormone (GH) secretion. GHRH also stimulates the production of GH. GHRH is released in a pulsatile manner, stimulating similar pulsatile release of GH. In addition, GHRH also promotes slow-wave sleep directly.

Product Info

Amount : 1 mg

Purification : Greater than 98.0% as determined by (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.

Content : The GHRH peptide (1mg/ml) was lyophilized after extensive dialyses against 1.7 mg sodium phosphate buffer (0.1 mg sodium phosphate monobasic & 1.6 mg sodium phosphate dibasic).
Lyophilized Growth Hormone Releasing Hormone although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution GHRF should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Storage condition :

Amino Acid : The free base of sermorelin has the empirical formula C₁₄₉H₂₄₆N₄₄O₄₂S. 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.

Application Note

It is recommended to reconstitute the lyophilized GHRH in sterile 18MΩ-cm H₂O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions. The GHRH is also soluble in 1% Acetic acid at a concentration of >1mg/ml to give a clear, colorless solution. GHRH increases plasma growth hormone concentrations by directly stimulating the anterior pituitary gland to release natural human growth hormone.

