

## Human GHRF / GHRH / Somatoliberin - Purified

<b>Alternate names:</b>	GRF, Growth hormone-releasing factor, Growth hormone-releasing hormone, Sermorelin, Somatocrinin, Somatorelin
<b>Catalog No.:</b>	PA1185X
<b>Quantity:</b>	1 mg
<b>Concentration:</b>	1.0 mg/ml
<b>Background:</b>	<p>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.</p> <p>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.</p>
<b>Uniprot ID:</b>	<a href="#">P01286</a>
<b>NCBI:</b>	<a href="#">NP_001171660.1</a>
<b>GeneID:</b>	<a href="#">2691</a>
<b>Species:</b>	Human
<b>Source:</b>	Synthetic, E.coli
<b>Format:</b>	<p><b>State:</b> Lyophilized purified protein (sterile filtered)</p> <p><b>Purity:</b> &gt;98% Greater than 98.0% as determined by:</p> <p>(a) Analysis by RP-HPLC.</p> <p>(b) Anion-exchange FPLC.</p> <p>(c) Analysis by reducing and non-reducing SDS-PAGE Silver Stained.</p> <p><b>Buffer System:</b> 1.7mg sodium phosphate buffer (0.1 mg sodium phosphate monobasic &amp; 1.6mg sodium phosphate dibasic).</p> <p><b>Reconstitution:</b> Restore in sterile 18Mohm-cm H<sub>2</sub>O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.</p>
<b>Description:</b>	<p>Growth Hormone Releasing Hormone Human Synthetic is a single, non-glycosylated, polypeptide chain containing 29 amino acids. 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.</p> <p><b>AA Sequence:</b></p> <p>The free base of sermorelin has the empirical formula C<sub>149</sub>H<sub>246</sub>N<sub>44</sub>O<sub>42</sub>S. 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-NH<sub>2</sub></p> <p>The sequence of the first five N-terminal amino acids was determined and was found to be Tyr-Ala-Asp-Ala-Ile.</p>

**Biological Activity:** GHRH increases plasma growth hormone concentrations by directly stimulating the anterior pituitary gland to release natural human growth hormone.

**Molecular weight:** 3 kDa 3358 Dalton

**Storage:**

Prior to reconstitution stable at RT for 3 weeks.  
 Following reconstitution store the protein undiluted at 2-8°C for one week or (in aliquots) at -20°C for longer.  
 Avoid repeated freezing and thawing.  
 For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).  
 Shelf life: one year from despatch.

**Pictures:**

Precursor- Protein structure and amino acid sequence.

