Active Recombinant Human Growth Hormone Releasing Hormone

Cat. No. GHRH-288H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	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.
Species	Human
Source	Human
Description	Growth-hormone-releasing hormone (GHRH), also known as growth-hormone-releasing factor (GRF or GHRF) or somatocrinin, is a 44-amino acidpeptide hormoneproduced in the arcuate nucleusof 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 glandwhere 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 sleepdirectly.
Form	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).

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Purity	Greater than 98.0% as determined by (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.
Bio-activity	GHRH increases plasma growth hormone concentrations by directly stimulating the anterior pituitary gland to release natural human growth hormone.
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Solubility	It is recommended to reconstitute the lyophilized GHRH in sterile 18Mμ-cm H2O not less than 100 g/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.
Amino acid sequence	The sequence of the first five N-terminal amino acids was determined and was found to be Tyr-Ala-Asp-Ala-Ile.
Storage	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.
Pathways	Neuroactive ligand-receptor interaction; Signaling by GPCR

GENE INFORMATION

Gene Name	GHRH growth hormone releasing hormone [Homo sapiens]
Official Symbol	GHRH
Synonyms	GHRH; growth hormone releasing hormone; OTTHUMP00000030915; growth

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	hormone-releasing factor; growth hormone-releasing hormone; sermorelin; somatocrinin; somatoliberin; somatorelin; GRF; INN; GHRF; MGC119781
Gene ID	2691
mRNA Refseq	NM_001184731
Protein Refseq	NP_001171660
MIM	139190
UniProt ID	P01286
Chromosome Location	20q11.2
Function	growth hormone-releasing hormone activity; growth hormone-releasing hormone receptor binding

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