



Recombinant Human Growth Hormone (rhGH)

Catalog #301-01

Sizes: 20 µg, 500 µg or 1 mg

Product Description

Human Growth Hormone (GH) is a member of a family of growth factors that includes prolactin, placental lactogens, proliferins, and somatolactin. It is synthesized primarily by somatotropes in the anterior pituitary and is stored in secretory granules. The pulsatile release of GH into circulation is regulated by the concerted actions of the hypothalamic hormones-GH-releasing hormone (GHRH) and somatostatin (SST) – as well as by signals from the periphery-ghrelin and leptin.⁴ The human GH cDNA encodes a 217 amino acid (aa) residue precursor with a 26 aa putative signal peptide. By alternative splicing, at least four isoforms of GH have been indentified.

Specifications

Synonyms:	Somatotropin, GHN, GH-N, hGH-N, IGHD1B, pituitary growth hormone
AA Sequence:	SFPTIPLSRLF DNAMLRAHRL HQLAFDTYQE FEEAYIPKEQ KYSFLQNPQT SLCFSESIPT PSNREETQK SNLELLRISL LLIQSWLEPV QFLRSVFANS LYGASDSNV YDLLKDLEEG IQTLMGRLED GSPRTGQIFK QTYSKFDTNS HNDDALLKNY GLLYCFRKDM DKVETFLRIV QCRSVEGSCG F
Source:	<i>Escherichia coli</i>
Molecular Weight:	Approximately ~22 kDa, a single non-glycosylated polypeptide chain containing 192 amino acids
Purity	> 95% by SDS-PAGE
Physical Appearance:	White lyophilized powder.
Endotoxin:	<0.1 ng/µg of protein (<1 EU/µg)

Formulation

Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4 containing 2% dextran as protectant.

Rev. 0

Reconstitution

Reconstitute in sterile distilled water containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL.

Shipping and Storage

The product is shipped on gel pack. Upon receipt, store at -20°C after receiving. Upon reconstitution, store at 2-8 °C for up to one week. For maximal stability, aliquot and store at -20 °C. Avoid repeated freeze/ thaw cycles.

Usage

rhGH is for research use only. It is not approved for human or animal use, or for application in clinical or *in vitro* diagnostic procedures.