



*Recombinant Human GH*  
(Growth Hormone)

*Catalog Number: 100-40*

*Accession Number: P01241*

*Specifications and Uses:*

**Alternate Names:** Somatotropin

**Description:**

Growth Hormone (GH) is an important growth factor made in and secreted throughout the body by the anterior pituitary gland. It stimulates growth and cell reproduction and regeneration in humans and other animals. The inability to appropriately produce or respond to GH results in diseases of decreased stature in children and adults. Although GH is used to treat several growth disorders, it is thought to be a very complex hormone with many of its functions yet to be uncovered. Recombinant human GH is non-glycosylated protein, containing 192 amino acids, with a molecular weight of 22.2 kDa.

**Source:** *E.coli*

**Physical Appearance:** Sterile filtered white lyophilized (freeze-dried) powder.

**Formulation and Stability:**

Recombinant human GH is lyophilized from 20 mM NaHCO<sub>3</sub>, pH 8.0.

Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

**Reconstitution:**

Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/mL, which can be further diluted into other aqueous solutions.

**Protein Content and Purity (typically ≥ 98%) determined by:**

Reducing and Non-reducing SDS-PAGE, UV spectroscopy at 280 nm

**Endotoxin Level:**

Measured by kinetic LAL analysis and is typically ≤ 1 EU/μg protein.

**Biological Activity:**

The activity is determined by the ability to induce proliferation of PDF 9D11 cells for this effect and is typically 0.5-0.8 ng/mL.

**AA Sequence:**

MFPTIPLSRL FDNAMLRAHR LHQLAFDTYQ EFEEAYIPKE QKYSFLQNPQ TSLCFSESIP TPSNREETQQ  
KSNLELLRIS LLLIQSWLEP VQFLRSVFAN SLVYGASDSN VYDLLKDL EE GIQTLMGRLE DGSPRTGQIF  
KQTYSKFD TN SHND DALLKN YGLLYCFR KD MDKVETFLRI VQCRSVEGSC GF

**THIS PRODUCT IS FOR RESEARCH USE ONLY AND IS NOT FOR USE IN HUMANS!**

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