

## GFH40AF Recombinant Human Growth Hormone (Animal-Free)

### Description

Growth hormone is an important mitogenic growth factor that is synthesized, stored, and secreted by somatotrophic cells of the anterior pituitary gland. Growth Hormone stimulates growth, cell reproduction, and cell regeneration. In children, Growth Hormone deficiencies can cause short stature, growth failure, and delayed sexual maturity. Adult Growth Hormone deficiency presents with reduced lean body mass, increased adiposity, reduced muscle strength, and ultimately premature mortality.

This product is produced with no animal derived raw products. All processing and handling employs animal free equipment and animal free protocols.

<b>Length</b>	192 aa
<b>Molecular Weight</b>	22.3 kDa
<b>Source</b>	E. coli
<b>Accession Number</b>	P01241
<b>Purity</b>	≥95% determined by reducing and non-reducing SDS-PAGE

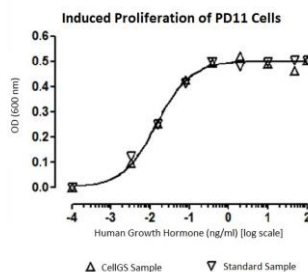
### Specifications

<b>Alternative Names</b>	Somatotropin, GH, pituitary growth hormone, IGHD1B, GH-N, GHN, hGH-N
<b>Biological Activity</b>	Human Growth Hormone (Animal-Free) is fully biologically active when compared to standard. The activity is determined by a proliferation assay using PD11 cells.
<b>Endotoxin Level</b>	≤1.00 EU/μg as measured by kinetic LAL
<b>Formulation</b>	Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 20 mM sodium bicarbonate, pH 8.0
<b>AA Sequence</b>	MFPTIPLSRL FDNAMLR AHR LHQLAFDTYQ EFEEAYIPKE QKYSFLQNPQ TSLCFSESIP TPSNREETQQ KSNLELLRIS LLLIQSWLEP VQFLRSVFAN SLVYGASDSN VYDLLKDLLE GIQTLMGRLE DGSPTGQIF KQTYSKFDTN SHNDALLKN YGLLYCFRKD MDKVETFLRI VQCRSVEGSC GF

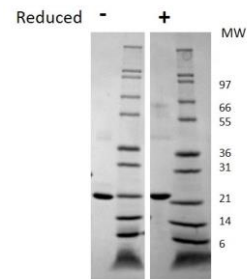
### Preparation and Storage

<b>Reconstitution</b>	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 0.1 mg/ml, which can be further diluted into other aqueous solutions.
<b>Stability and Storage</b>	12 months from date of receipt when stored at -20°C to -80°C as supplied. 1 month when stored at 4°C after reconstituting as directed. 3 months when stored at -20°C to -80°C after reconstituting as directed.

### Data



Induced proliferation of PD11 cells assay for Human Growth Hormone.



Non-reducing (-) and reducing (+) conditions in a 4 - 20% Tris-Glycine gel stained with Coomassie Blue. 1 μg of protein was loaded in each lane. Human Growth Hormone has a predicted Mw of 22.3 kDa.