

GH

Catalog # PVGS1214

Specification

GH - Product Information

Primary Accession **Species** Human <u>P01241</u>

Sequence Phe27-Phe217

Purity > 95% as analyzed by SDS-PAGE
> 95% as analyzed by HPLC

Endotoxin Level < 0.2 EU/ μg of protein by gel clotting method

Biological Activity

ED < sub > 50 < /sub > < 0.5 ng/ml, measured by a cell proliferation assay using Nb2-11 Cells, corresponding to a specific activity of > $2.0 \times 10 < sup > 6 < /sup > units/mg$.

Expression System E. coli

Formulation

Lyophilized after extensive dialysis against PBS.

Reconstitution

It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH_2O up to $100 \mu g/ml$.

Storage & Stability

Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

GH - Additional Information

Gene ID 2688

Other Names Somatotropin, Growth hormone, GH, GH-N, Growth hormone 1, Pituitary growth hormone, GH1

Target Background

Growth Hormone (GH) is a member of the somatotropin/prolactin family which play an important role in growth control. The human GH cDNA encodes a 217 amino acid (aa), and the first 26 aa is a signal peptide. By alternative splicing, at least four isoforms of GH have been identified. The major role of GH in stimulating body growth is to stimulate the liver and other tissues to secrete IGF-1.



GH stimulates both the differentiation and proliferation of myoblasts, and also stimulates amino acid uptake and protein synthesis in muscle and other tissues.

GH - Protein Information

Name GH1

Function

Plays an important role in growth control. Its major role in stimulating body growth is to stimulate the liver and other tissues to secrete IGF1. It stimulates both the differentiation and proliferation of myoblasts. It also stimulates amino acid uptake and protein synthesis in muscle and other tissues.

Cellular Location Secreted

GH - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

GH - Images