

GH
Catalog # PVGS1017

Specification

GH - Product Information

Primary Accession [P06880](#)
Species
Mouse

Sequence
Phe27-Phe216

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

Endotoxin Level
< 1 EU/ µg of protein by LAL method

Biological Activity
Recombinant mouse growth hormone is fully biologically active when compared to standard human growth hormone which is 3.0 units/mg.

Expression System
E. coli

Theoretical Molecular Weight
22 kDa

Formulation **Lyophilized after extensive dialysis against 50 mM Tris-HCl, pH 8.0, 500 mM NaCl buffer.**

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 sterile 18 MΩ-cm H₂O up to 100 µg/ml.

Storage & Stability
Upon receiving, this product remains stable for up to 6 months at -70°C or -20°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. Avoid repeated freeze-thaw cycles.

GH - Additional Information

Gene ID 14599

Other Names
Somatotropin, Growth hormone, Gh1, Gh

Target Background
Growth Hormone (GH), is a member of the somatotropin / prolactin family of hormones which play

an important role in growth control. The gene, along with four other related genes, is located at the growth hormone locus on chromosome 17 where they are interspersed in the same transcriptional orientation; an arrangement which is thought to have evolved by a series of gene duplications. The five genes share a remarkably high degree of sequence identity. Alternative splicing generates additional isoforms of each of the five growth hormones, leading to further diversity and potential for specialization. This particular family member is expressed in the pituitary but not in placental tissue as is the case for the other four genes in the growth hormone locus. Mutations in or deletions of the gene lead to growth hormone deficiency and short stature.

GH - Protein Information

Name Gh1

Synonyms Gh

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.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

GH - Images