

# Recombinant Human Growth Hormone 1, His-tagged

**Cat. No.** GH1-382H    **Lot. No.** (See product label)

## SPECIFICATION

|                         |                                                                                                                                                                                                                          |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | Recombinant Human GH1 is a protein composed of 22.9 kDa, 205 amino residues and it contains a 6-His-tag at the N-terminal end and is purified by sequential chromatography.                                              |
| <b>Species</b>          | Human                                                                                                                                                                                                                    |
| <b>Description</b>      | GH1 is a member of the somatotropin / prolactin family of hormones which play an important role in growth control.                                                                                                       |
| <b>Form</b>             | Lyophilized from a PBS 0.05M buffer at pH 7.5.                                                                                                                                                                           |
| <b>Purity</b>           | > 97% by SDS-PAGE gel                                                                                                                                                                                                    |
| <b>M.W</b>              | 22.9 kDa                                                                                                                                                                                                                 |
| <b>Endotoxin Level</b>  | < 0.04 EU/μg protein (LAL method)                                                                                                                                                                                        |
| <b>Sequence</b>         | HHHHHHFPTIPLSRPFDNAMLRAHRLHQLAFDITYQEFEEAYIPKEQKYSFLQNPQTS<br>LCFSES IPTSPNREE TQQKSNLELLRISLLLIQSWLEPVQFLRSVFANSLVYGASDSN<br>VYDLLKDLEEGIQ TLMGRLEDGSPRTGQIF KQTYSKFDTNSHNDDALLKNYGLLYCF<br>RKDMDKVETFLRIVQCRSVEGSCGFAG |
| <b>p.I</b>              | 5.98                                                                                                                                                                                                                     |
| <b>Extinction coeff</b> | E0.1% = 0.77 (A 280nm)                                                                                                                                                                                                   |

 Tel: 1-631-559-9269    1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)     Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

|                                      |                                                                                                                                                                                                                                                                                                                 |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Reconstitution Recommendation</b> | Lyophilized proteins should be reconstituted in water to a concentration of 50 ng/μl.                                                                                                                                                                                                                           |
| <b>Biological Activity</b>           | ED50 ≤ 0.04-0.1ng/mL. The biological activity of human Growth Hormone is measured by cell proliferation using Nb2-11 cells.                                                                                                                                                                                     |
| <b>Storage</b>                       | This lyophilized preparation is stable at 2-8°C. For long storage should be kept at -20°C and it is recommended to add a carrier protein (0.1% HAS or BSA). Repeated freezing and thawing is not recommended.                                                                                                   |
| <b>Official Symbol</b>               | GH1                                                                                                                                                                                                                                                                                                             |
| <b>Pathways</b>                      | Adipogenesis; Cytokine Signaling in Immune system; Cytokine-cytokine receptor interaction; Diabetes pathways; Endochondral Ossification; Growth hormone receptorsignaling; Immune System; Jak-STAT signaling pathway; Neuroactive ligand-receptor interaction; Synthesis, Secretion, and Deacylation of Ghrelin |

## GENE INFORMATION

|                       |                                                                                                                                                                       |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>      | GH1 growth hormone 1 [ Homosapiens ]                                                                                                                                  |
| <b>Synonyms</b>       | GH1; growth hormone 1; GH; GHN; GH-N; hGH-N; IGHD1B; somatotropin; pituitary growth hormone; Somatotropin; Growth hormone; Growth hormone 1; Pituitary growth hormone |
| <b>Gene ID</b>        | 2688                                                                                                                                                                  |
| <b>mRNA Refseq</b>    | NM_000515                                                                                                                                                             |
| <b>Protein Refseq</b> | NP_000506                                                                                                                                                             |

 Tel: 1-631-559-9269 1-516-512-3133

 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

|                            |                                                                                                                                           |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| <b>MIM</b>                 | 139250                                                                                                                                    |
| <b>UniProt ID</b>          | P01241                                                                                                                                    |
| <b>Chromosome Location</b> | 17q22-q24                                                                                                                                 |
| <b>Function</b>            | growth factor activity; growth hormone receptor binding; hormone activity; metal ion binding; prolactin receptor binding; protein binding |
| <b>Growth hormone</b>      |                                                                                                                                           |

 Tel: 1-631-559-9269 1-516-512-3133 Email: [info@creative-biomart.com](mailto:info@creative-biomart.com)  Fax: 1-631-938-8127 45-1 Ramsey Road, Shirley, NY 11967, USA