

Recombinant Human Growth Hormone 1 (Active) , His-tagged

Cat. No. GH1-002N Lot. No. (See product label)

SPECIFICATION

Product Overview	It is produced by transient expression of GH in non-transgenic plant. The protein contains a 6His-tag in its N-terminal end. It is purified by sequential chromatography (IMAC and HIC). This product contains no animal –derived components or impurities.
Species	Human
Source	Nicotiana Benthamiana
Description	Growth Hormone (GH), is a protein produced by pituitary gland, is a member of the somatotropin / prolactin family of hormones which play an important role in growth control. This cytokine regulate growth and metabolism by binding to the GH receptor on the surface of many cell types. It act directly on the ends of the long bones promoting their growth and directly or indirectly act ,via IGF-1, on B cell, NK cells and macrophages to exert immunomodulatory activities. Alternative splicing generates additional isoforms of each of the five growth hormones, leading to further diversity and potential for specialization.
Formulation	This product is lyophilized from a solution of Tris 0.05M, pH 7.4, NaCl 0.5M, and Triton X-100 0.1%.
Molecular formula	C1025H1570N280O306S7.
Extinction coefficient	E0.1% = 0,770 (A280 nm).
Molecular weight	22.9 kDa

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

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

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

Purity assay	> 95% by SDS-PAGE gel.
Endotoxin level	< 0.01 EU/μg protein (LAL method)
Biological Activity	the biological activity is measured in a cell proliferation assay using the rat lymphoma, Nb2-11 (0.001-0.04 ng/mL).
Preparation instructions	It is recommended to reconstitute the lyophilized HGH in sterile 18MΩ-cm H ₂ O not less than 100μg/ml, which can then be further diluted to other aqueous solutions.
Storage	Lyophilized GH, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution, HGH should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Repeated freezing and thawing is not recommended.

GENE INFORMATION

Gene Name	GH1 growth hormone 1 [Homo sapiens]
Official Symbol	GH1
Synonyms	GH1; growth hormone 1; GH; GHN; GH-N; hGH-N; IGHD1B; Pituitary growth hormone; growth hormone 1; GH1; IGHD1B; Somatotropin; hGH
Gene ID	2688
mRNA Refseq	NM_000515
Protein Refseq	NP_000506

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

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

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

MIM	604489
UniProt ID	P01241
Chromosome Location	17q24.2
Function	growth factor activity; growth hormone activity; growth hormone receptor binding; prolactin receptor binding; protein binding

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

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

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