

Recombinant Human Growth Hormone 1

Cat. No. GH1-80H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human Growth Hormone 1 encoding the human growth hormone protein sequence (containing the signal peptide sequence and the mature growth hormone sequence) was expressed in modified <i>human 293 cells</i> .
Species	Human
Source	HEK293
Description	Human growth hormone (hGH) is a member of the somatotropin/prolactin family of hormones. Its activity is required for normal human growth and development. It regulates an extensive variety of physiological functions relating to human growth and metabolism, primarily by inducing the expression of insulin-like growth factor 1 (IGF-1). hGH is synthesized and secreted into the circulation by acidophilic or somatotropic cells of the anterior pituitary gland in response to hGH releasing hormone (HGHR) from the hypothalamus.
Amino Acid Sequence	FPTIPLSRLFDNAMLRAHRLHQLAFDITYQEFEEAYIPKEQKYSFLQNPQTSLCFSESI PTPSNREETQQKSNLELLRISLLLIQSWLEPVQFLRSVFANSLVYGASDSNVYDLLKD LEEGIQTLMGRLEDGSPRTGQIFKQTYSKFDTNSHNDDALLKNYGLLYCFRKDMDK VETFLRIVQCRSVEGSCGF.
Molecular Mass	Growth Hormone migrates as a band with an apparent MW of 20 kDa in SDS-PAGE. This compares with the predicted molecular mass of 22.1 kDa.
pI	Unmodified Growth Hormone has a predicted pI of 5.27.

 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	>95%, as determined by SDS-PAGE and visualized by silver stain.
Formulation	When reconstituted in 0.5 ml sterile phosphate-buffered saline, the solution will contain 1% human serum albumin (HSA) and 10% trehalose.
Reconstitution	It is recommended that 0.5 ml of sterile phosphate-buffered saline be added to the vial.
Storage	Lyophilized products should be stored at 2 to 8°C. Following reconstitution short-term storage at 4°C is recommended, and longer-term storage of aliquots at -18 to -20°C. Repeated freeze thawing is not recommended.

GENE INFORMATION

Gene Name	GH1 growth hormone 1 [Homo sapiens]
Synonyms	GH1; growth hormone 1; GH; GHN; GH-N; hGH-N; IGHD1B; pituitary growth hormone
Gene ID	2688
mRNA Refseq	NM_000515
Protein Refseq	NP_000506
UniProt ID	P01241
Chromosome Location	17q22-q24
MIM	139250

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Pathway	Cytokine-cytokine receptor interaction; Jak-STAT signaling pathway; Neuroactive ligand-receptor interaction
Function	growth factor activity; growth hormone activity; growth hormone receptor binding; olactin receptor binding; protein binding

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