

Recombinant Human GH1 therapeutic protein(Somatotropin)

Cat. No. GH-P016H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	recombinant human growth hormone (somatotropin) 191 residues, MW 22.1 kD, synthesized in E. coli
Species	Human
Source	E.coli
ProteinLength	191 Aa
Description	The protein encoded by this gene 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. The expression product is the active ingredient of BioTropin, Genotropin, Humatrope, Norditropin, Nutropin, NutropinAQ, Protropin, Saizen, Serostim and Tev-Tropin.
Molecular Mass	22.1 KDa

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AA Sequence	FPTIPLSRLFDNAMLRAHRLHQLAFDTYQEFEEAYIPKEQKYSFLQNPQTSLCFSESI PTPSNREETQQKS NLELLRISLLLIQSWLEPVQFLRSVFANSLVYGASDSNVYDLLK DLEEGIQTLMGRLEDGSPRTGQIFKQT YSKFDTNSHNDDALLKNYGLLYCFRKDM KVETFLRIVQCRSVEGSCGF
Endotoxin	< 1.0 EU per µg of the protein
Purity	>95%
Storage	Can be stored at +4 centigrade short term (1-2weeks). For long term storage, aliquot and store at -20 centigrade or -70 centigrade. Avoid repeated freezing and thawing cycles.
Alias	GH1; GH; GH N; GHN; hGH N; GH-N; hGH-N; IGHD1B; Somatotropin

GENE INFORMATION

Gene Name	GH1 growth hormone 1 [Homo sapiens]
Official Symbol	GH1
Synonyms	GH1; growth hormone 1; somatotropin; GH; GH N; GHN; hGH N; pituitary growth hormone; GH-N; hGH-N; IGHD1B;
Gene ID	2688
mRNA Refseq	NM_000515
Protein Refseq	NP_000506
MIM	139250

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UniProt ID	P01241
Chromosome Location	17q22-q24
Pathway	Adipogenesis, organism-specific biosystem; Cytokine Signaling in Immune system, organism-specific biosystem; Cytokine-cytokine receptor interaction, organism-specific biosystem; Cytokine-cytokine receptor interaction, conserved biosystem; Diabetes pathways, organism-specific biosystem; Disease, organism-specific biosystem; Endochondral Ossification, organism-specific biosystem;
Function	growth factor activity; growth hormone receptor binding; growth hormone receptor binding; hormone activity; metal ion binding; prolactin receptor binding; protein binding;

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