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GH Human 20kDa

Growth Hormone Pituitary 20kDa Human Recombinant
GRF0122

Product Overview

Name	GH Human 20kDa
Description	
Growth Hormone Pituitary 20kDa Human Recombinant	
Accession (Primary)	P01241
Synonyms	
GH1, GH, GHN, GH-N, hGH-N,Pituitary growth hormone, Growth hormone 1, Somatotropin.	
Introduction	
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.	
Source	
Escherichia Coli.	
Physical Appearance	
Sterile Filtered White lyophilized (freeze-dried) powder.	
Formulation	
HGH-20K was lyophilized from a concentrated (1mg/ml) solution with 0.0045mM NaHCO3 previously adjusted to pH 10.	
Stability	
Lyophilized Pituitary Growth Hormone-20K although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution and filter sterilization GH-20K can be stored at 4°C for up to 4 weeks. For long term storage and more diluted solutions it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.	
Purity	

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Greater than 98.0% as determined by: (a) Analysis by SEC-HPLC. (b) Analysis by SDS-PAGE.

Amino acid sequence

The sequence of the first five N-terminal amino acids was determined and was found to be Ala-Phe-Pro-Thr-Ile.

Solubility

It is recommended to reconstitute the lyophilized Growth Hormone Pituitary in 0.4% NaHCO3 adjusted to pH 10, not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Protein content

HGH-20K quantitation was carried out by two independent methods 1. UV spectroscopy at 280 nm using the absorbency value of 0.735 as the extinction coefficient for a 0.1% (1mg/ml) solution. This value is calculated by the PC GENE computer analysis program of protein sequences (IntelliGenetics). 2. Analysis by RP-HPLC, using a calibrated solution of GH-20K as a Reference Standard.

Precautions

GH Human 20kDa is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (P01241)