9051 Mira Mesa Blvd, #910094
San Diego, CA 92191
Tel: 760-390-3989

GH Human

Growth Hormone Human Recombinant
GRF0121

Product Overview

Name	GH Human
Description	
Growth Hormone 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	
GH protein lyophilized from a 0.2 μm filtered concentrated solution with 20mM PB, pH 7.0 and 3% Mannitol.	
Stability	
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). Please prevent freeze-thaw cycles.	
Purity	
Greater than 98.0% as determined by SDS-PAGE.	
Amino acid sequence	

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FPTIPLSRLF DNAMLRAHRL HQLAFDTYQE FEEAYIPKEQ KYSFLQNPQT SLCFSESIPT PSNREETQQK SNLELLRISL LLIQSWLEPV QFLRSVFANS LVYGASDSNV YDLLKDLEEG IQTLMGRLED GSPRTGQIFK QTYSKFDTNS HNDDALLKNY GLLYCFRKDM DKVETFLRIV QCRSVEGSCG F.

Biological Activity

The ED 50 was determined by the proliferation assay of rat lymphoma NB2-11 cells and was found to be less than 0.1ng/ml, corresponding to a specific activity of > 1.0 × 10 7 IU/mg.

Solubility

It is recommended to reconstitute the lyophilized HGH in sterile 18MΩ-cm H2O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

References

Title :Growth Hormone-Releasing Hormone (GHRH) Neurons in the Arcuate Nucleus (Arc) of the Hypothalamus Are Decreased in Transgenic Rats Whose Expression of Ghrelin Receptor Is Attenuated: Evidence that Ghrelin Receptor Is Involved in the Up-Regulation of GHRH Expression in the Arc. Publication: Published online before print May 25, 2006, doi: 10.1210/en.2005-1619 Endocrinology September 1, 2006 vol. 147 no. 9 4093-4103. Link : GH prospec publication

Precautions

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

Target Information: (P01241)