GH1
Human Recombinant Pituitary Growth Hormone 1

Catalog No.	CRH199A	**Quantity:**	10 µg
	CRH199B		50 µg
	CRH199C		1.0 mg

Alternate Names: GH1, GH, GHN, GH-N, hGH-N,Pituitary growth hormone, Growth hormone 1, Somatotropin.

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.

Human Recombinant GH1 is a single, non-glycosylated polypeptide chain containing 177 amino acids.

Gene ID: 2688

Source: *E. coli*

Molecular Weight: 20.3 kDa

Formulation: Lyophilized from a sterile filtered solution containing 0.0045 mM $NaHCO_3$ pH 10

Purity: >98.0% by RP-HPLC and SDS-PAGE

Endotoxin Level: <0.1 ng/µg of GH1

Amino Acid Sequence: The sequence of the first five N-terminal amino acids is Ala-Phe-Pro-Thr-Ile.

Reconstitution: **Centrifuge vial prior to opening**. First add 0.4% $NaHCO_3$ adjusted to pH 10 to the vial to fully solubilize the protein to a concentration not less than 100 µg/mL. After complete solubilization of the protein, it can be further diluted to other aqueous solutions.

Storage & 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**. **Please note that the addition of any carrier protein into this product may produce unwanted endotoxin. This depends upon the particular application employed. Avoid repeated freeze-thaw cycles.**

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