

## 32-1256: GH Recombinant Protein

**Alternative Name :** GH1,GH,GHN,GH-N,hGH-N,Pituitary growth hormone,Growth hormone 1,Somatotropin.

### Description

Source : Escherichia Coli. GH Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 191 amino acids and having a molecular mass of 22kDa. Growth Hormone is purified by proprietary chromatographic techniques. 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.

### Product Info

<b>Amount :</b>	0.5mg
<b>Purification :</b>	Greater than 98.0% as determined by:(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.
<b>Content :</b>	GH protein lyophilized from a 0.2µm filtered concentrated solution with 20mM PB, pH 7.0 and 3% Mannitol.
<b>Storage condition :</b>	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.
<b>Amino Acid :</b>	FPTIPLSRLF DNAMLRAHRL HQLAFDTYQE FEEAYIPKEQ KYSFLQNPQT SLCFSES IPT PSNREETQQK SNLELLRISL LLIQSWLEPV QFLRSVFANS LVIYASDSNV YDLLKDLEEG IQTLMGRLED GSPRTGQIFK QTYSKFDTNS HNDDALLKNY GLLYCFRKDM DKVETFLRIV QCRSVEGSCG F.

### Application Note

It is recommended to reconstitute the lyophilized HGH in sterile 18M $\Omega$ cm H<sub>2</sub>O not less than 100 $\mu$ g/ml, which can then be further diluted to other aqueous solutions. The ED<sub>50</sub> 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  $\Omega$  107 IU/mg.

