

Recombinant human Growth Hormone 1/GH1 protein

Catalog Number: GRH3001

PRODUCT INFORMATION

Expression system

E.coli

Domain

27-217aa

UniProt No.

P01241

NCBI Accession No.

NP_000506

Alternative Names

GH, GH1, GHN, GH-N, Growth hormone, Growth hormone 1, hGH-N, Pituitary growth hormone, Somatotropin

PRODUCT SPECIFICATION

Molecular Weight

22.2 kDa (192aa) confirmed by MALDI-TOF

Concentration

1mg/ml (determined by Bradford assay)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) 88mM mannitol

Purity

> 95% by SDS-PAGE

Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

Biological Activity

Measured in a cell proliferation assay using Nb2-11 Rat lymphoma cells. The ED50 range $\leq 0.2\text{ng/ml}$.

Tag

Non-Tagged

Application

SDS-PAGE, Bioactivity

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

Human growth hormone (hGH, somatotropin), a protein hormone from the anterior lobe of the pituitary gland,

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comprises a single polypeptide chain of 191 amino acid residues. The growth hormone amino acid sequence varies considerably between species, and non-primate growth hormones have little activity in man. Its main function is the stimulation of somatic and bone growth, as well as an increase in the size and mass of organs and tissues. Recombinant human growth hormone (rhGH) was purified by FPLC gel-filtration chromatography, after refolding of the isolated inclusion bodies in a renaturation buffer.

Amino acid Sequence

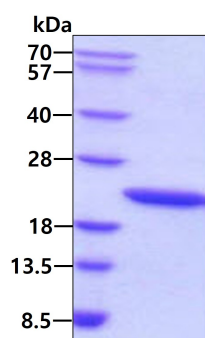
MFPTIPLSRL FDNAMLRHR LHQLAFDTYQ EFEEAYIPKE QKYSFLQNPQ TSLCFSESIP TPSNREETQQ KSNLELLRIS
LLLIQSWLEP VQFLRSVFAN SLVYGASDSN VYDLLKDLLE GIQTLMGRLD DGSPRTGQIF KQTYSKFDTN SHNDDALLKN
YGLLYCFRKD MDKVETFLRI VQCRSVEGSC GF

General References

Wickens., et al.(1978) J. Biol Chem. 253(7):2483-2495
Goeddel. et al.(1979) Proc. Natl. Acad. Sci. 76:106-110
Chang, et al. (1978) Nature 275:617-624
ullrich. et al. (1977) Science 196:1313-1319.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

Biological Activity

Human Growth Hormon Measured in a cell proliferation assay using Nb2-11 Rat lymphoma cells. The ED50 range ≤ 0.2 ng/ml.

