

# Recombinant human Growth Hormone

Catalog G001 - 1.0 mg  
Lot A0006  
product specification sheet: PS-G001



Life Sciences Incubator  
Yalelaan 62  
3584 CM Utrecht  
The Netherlands

## Product description

Human growth hormone is a plasma protein with a calculated molecular weight of 22.1 kDa. The protein is a member of the somatotropin/prolactin family of hormones, which play an important role in growth control. Its 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. This protein is the product of all five exons.

Reference sequences: NM\_000515  
NP\_000506  
Swiss-prot P01241

Alternative names: Somatotropin  
Pituitary growth hormone  
growth hormone 1

Gene ID: 2688

The gene of human growth hormone was cloned, the protein was over-expressed in HEK293EBNA1 cells and was purified to homogeneity. The calculated molecular weight is 23.1 kDa and it contains an C-terminal hexahistidine tag. Each vial contains 1.0 mg human growth hormone.

## Storage and stability

Human growth hormone should be stored at - 80 °C (stable for at least 1 year). The buffer contains PBS without preservative. After thawing it should be stored in appropriate small aliquots at - 20 °C or - 80 °C (stable for at least 12 months).

## Sequence

```
matgsrtslllafgllclpwlqegsafptiplsrldnamlrahrlhq  
lafdyqefeeayipkeqkysflqnpqtslcfesiptpsnreetq  
qksnlellrisllliqswlepqvflrsvfanslvygasdsnvylldl  
eegiqtlmgrledgsprtqqifkqtyskfdtnshnddalknygl  
lycfrkdmkvvetflrivqcrsvegscgfgsaaahhhhhh
```

## PRODUCT USE LIMITATIONS, WARRANTY, DISCLAIMER

U-Protein Express BV products contain chemicals which may be harmful if misused. Due care should be exercised with all U-Protein Express BV products to prevent direct human contact. All products are intended For Research Use Only and ARE NOT ALLOWED FOR USE IN HUMANS. Each U-Protein Express BV product is shipped with documentation stating specifications and other technical information. U-Protein Express BV products are warranted to meet or exceed the stated specifications. U-Protein Express BV's sole obligation and the customer's sole remedy is limited to replacement of products free of charge in the event products fail to perform as warranted. U-Protein Express BV makes no other warranty of any kind whatsoever, and SPECIFICALLY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES OF ANY KIND OR NATURE WHATSOEVER, DIRECTLY OR INDIRECTLY, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, AS TO THE SUITABILITY, PRODUCTIVITY, DURABILITY, FITNESS FOR A PARTICULAR PURPOSE OR USE, MERCHANTABILITY, CONDITION, OR ANY OTHER MATTER WITH RESPECT TO U-Protein Express BV PRODUCTS. In no event shall U-Protein Express BV be liable for claims for any other damages, whether direct, incidental, foreseeable, consequential, or special (including but not limited to loss of use, revenue or profit), whether based upon warranty, contract, tort (including negligence) or strict liability arising in connection with the sale or the failure of U-Protein Express BV products to perform in accordance with the stated specifications.

Version 11/2018

page 1