

## Product datasheet

# Recombinant human Growth Hormone protein (Active) ab51232

[1 References](#) [2 Images](#)

### Description

|  |   |  |
|--|---|--|
| <b>Product name</b>                    | Recombinant human Growth Hormone protein (Active)   |  |
| <b>Biological activity</b>             | Measured in a cell proliferation assay using Nb2-11 Rat lymphoma cells. The ED50 range ≤ 0.2ng/ml.  |  |
| <b>Purity</b>                          | > 95 % SDS-PAGE.<br>Recombinant human Growth Hormone was purified by FPLC gel-filtration chromatography, after refolding of the isolated inclusion bodies in a renaturation buffer.   |  |
| <b>Endotoxin level</b>                 | < 1.000 Eu/μg   |  |
| <b>Expression system</b>               | Escherichia coli  |  |
| <b>Accession</b>                       | <b><u>P01241</u></b>  |  |
| <b>Protein length</b>                  | Full length protein   |  |
| <b>Animal free</b>                     | No  |  |
| <b>Nature</b>                          | Recombinant   |  |
| <b>Species</b>                         | Human   |  |
| <b>Sequence</b>                        | FPTIPLSRLFDNAMLRAHRLHQLAFDITYQEFEEAYIPKEQK<br>YSFLQNPQT<br>SLCFSESIPTPSNREETQQKSNLELLRISLLLIQSWLEPVQF<br>LRSVFANS<br>LVYGASDSNVYDLLKDLEEGIQTLMGRLDGSPRTGQIFK<br>QTYSKFDTNS<br>HNDDALLKNYGLLYCFRKDMDKVETFLRMVQCRSVEGSC<br>GF |  |
| <b>Predicted molecular weight</b>      | 22 kDa  |  |
| <b>Amino acids</b>                     | 27 to 217   |  |
| <b>Additional sequence information</b> | Full length mature chain without signal peptide. NP_000506.   |  |

### Specifications

Our **Abpromise guarantee** covers the use of **ab51232** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

**Applications** Western blot

SDS-PAGE  
Functional Studies

**Form** Liquid

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## Preparation and Storage

**Stability and Storage** Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.  
pH: 7.40  
Constituents: 0.0134% PBS, 1.6016% Mannitol  
This product is an active protein and may elicit a biological response in vivo, handle with caution.

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## General Info

**Function** Plays an important role in growth control. Its major role in stimulating body growth is to stimulate the liver and other tissues to secrete IGF-1. It stimulates both the differentiation and proliferation of myoblasts. It also stimulates amino acid uptake and protein synthesis in muscle and other tissues.

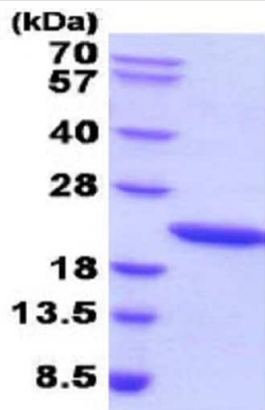
**Involvement in disease** Defects in GH1 are a cause of growth hormone deficiency isolated type 1A (IGHD1A) [MIM:262400]; also known as pituitary dwarfism I. IGHD1A is an autosomal recessive deficiency of GH which causes short stature. IGHD1A patients have an absence of GH with severe dwarfism and often develop anti-GH antibodies when given exogenous GH.  
Defects in GH1 are a cause of growth hormone deficiency isolated type 1B (IGHD1B) [MIM:612781]; also known as dwarfism of Sindh. IGHD1B is an autosomal recessive deficiency of GH which causes short stature. IGHD1B patients have low but detectable levels of GH. Dwarfism is less severe than in IGHD1A and patients usually respond well to exogenous GH.  
Defects in GH1 are the cause of Kowarski syndrome (KWKS) [MIM:262650]; also known as pituitary dwarfism VI.  
Defects in GH1 are a cause of growth hormone deficiency isolated type 2 (IGHD2) [MIM:173100]. IGHD2 is an autosomal dominant deficiency of GH which causes short stature. Clinical severity is variable. Patients have a positive response and immunologic tolerance to growth hormone therapy.

**Sequence similarities** Belongs to the somatotropin/prolactin family.

**Cellular localization** Secreted.

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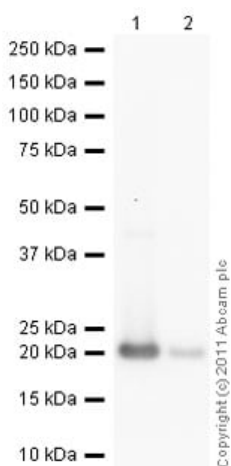
## Images



SDS-PAGE - Recombinant human Growth Hormone protein (Active) (ab51232)

15% SDS-PAGE - Recombinant human Growth Hormone protein (Active) (ab51232, 3 µg).

Reducing conditions. Visualized by coomassie blue stain.



Western blot - Recombinant human Growth Hormone protein (Active) (ab51232)

**All lanes** : Anti-Growth Hormone antibody [GH-1] ([ab9821](#)) at 1/500 dilution

**Lane 1** : Recombinant human Growth Hormone protein (Active) (ab51232) at 0.1 µg

**Lane 2** : Recombinant human Growth Hormone protein (Active) (ab51232) at 0.01 µg

**Secondary**

**All lanes** : Goat Anti-Mouse IgG H&L (HRP) preadsorbed ([ab97040](#)) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

**Exposure time:** 2 minutes

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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