

**Synonym**

GHR,GHBP,GH receptor

**Source**

Biotinylated Human Growth Hormone R Protein, Fc,Avitag(GHR-H82F3) is expressed from human 293 cells (HEK293). It contains AA Ala 27 - Tyr 264 (Accession # [P10912-1](#) ).

Predicted N-terminus: Ala 27

**Molecular Characterization**

GHR(Ala 27 - Tyr 264) P10912-1	Fc(Pro 100 - Lys 330) P01857	Avi
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This protein carries a human IgG1 Fc tag at the C-terminus, followed by an Avi tag (Avitag™)

The protein has a calculated MW of 55 kDa. The protein migrates as 65-90 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

**Labeling**

*Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.*

**Protein Ratio**

Passed as determined by the HABA assay / binding ELISA.

**Endotoxin**

Less than 1.0 EU per µg by the LAL method.

**Purity**

>90% as determined by SDS-PAGE.

**Formulation**

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

**Reconstitution**

Please see Certificate of Analysis for specific instructions.

*For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.*

**Storage**

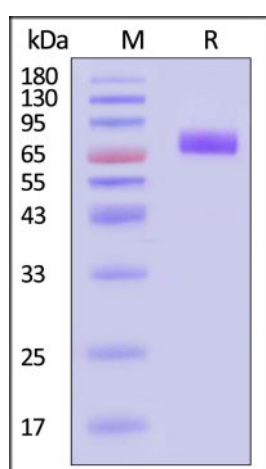
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

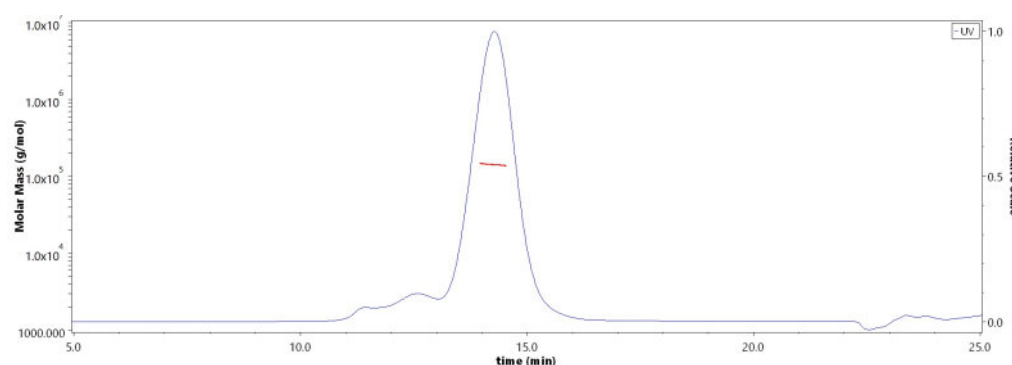
**SDS-PAGE**



Biotinylated Human Growth Hormone R Protein, Fc,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).

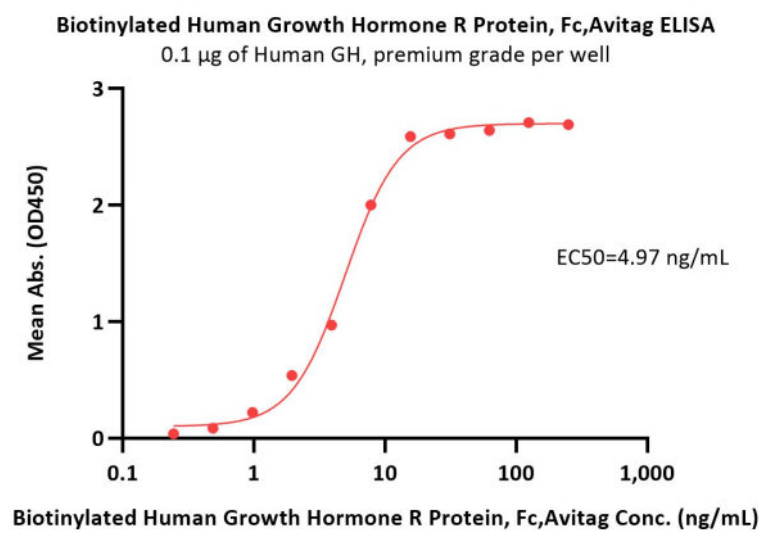
**Bioactivity-ELISA**

**SEC-MALS**



The purity of Biotinylated Human Growth Hormone R Protein, Fc,Avitag (Cat. No. GHR-H82F3) is more than 85% and the molecular weight of this protein is around 130-150 kDa verified by SEC-MALS.

[Report](#)



Immobilized Human GH, premium grade (Cat. No. GH1-H4118) at 1 µg/mL (100 µL/well) can bind Biotinylated Human Growth Hormone R Protein, Fc,Avitag (Cat. No. GHR-H82F3) with a linear range of 0.2-8 ng/mL (QC tested).

## Background

Growth hormone receptor (GHR) is also known as somatotropin receptor, growth hormone-binding protein (GHBR), which belongs to the type I cytokine receptor family or Type 1 subfamily. GHR contains one fibronectin type-III domain. GHR / GHBR is expressed in various tissues with high expression in liver and skeletal muscle. The soluble form (GHBP) is produced by phorbol ester-promoted proteolytic cleavage at the cell surface (shedding) by ADAM17/TACE. GHR is receptor for pituitary gland growth hormone involved in regulating postnatal body growth. On ligand binding, couples to the JAK2/STAT5 pathway. The soluble form (GHBP) acts as a reservoir of growth hormone in plasma and may be a modulator/inhibitor of GH signaling.

## Clinical and Translational Updates

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.