



#### Synonym

GHR,GHBP,GH receptor

#### Source

Human GHR, His Tag(GHR-H5222) 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

Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 29.6 kDa. The protein migrates as 40-55 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### **Endotoxin**

Less than 1.0 EU per  $\mu$ g by the LAL method / rFC method.

## **Purity**

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

#### **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

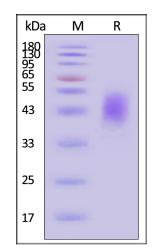
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

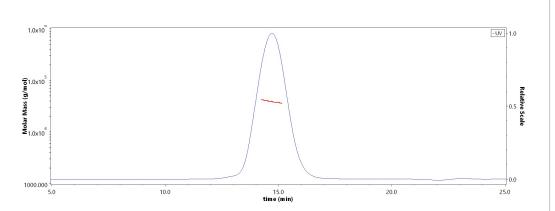
## **SDS-PAGE**



Human GHR, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With Star Ribbon Pre-stained Protein Marker).

# **Bioactivity-ELISA**

## **SEC-MALS**



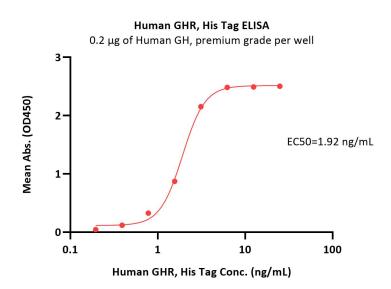
The purity of Human GHR, His Tag (Cat. No. GHR-H5222) is more than 90% and the molecular weight of this protein is around 35-50 kDa verified by SEC-MALS.

<u>Report</u>

# Human Growth Hormone R (GHR) Protein, His Tag (MALS verified)







Immobilized Human GH, premium grade (Cat. No. GH1-H4118) at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind Human GHR, His Tag (Cat. No. GHR-H5222) with a linear range of 0.2-3 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.

