

**Synonym**

GHR,GHBP,GH receptor

**Source**Rat Growth Hormone R, His Tag(GHR-R52H8) is expressed from human 293 cells (HEK293). It contains AA Phe 19 - Arg 265 (Accession # [P16310-1](#) ).

Predicted N-terminus: Phe 19

**Molecular Characterization**

GHR(Phe 19 - Arg 265)  
P16310-1 Poly-his

This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 30.2 kDa. The protein migrates as 36-50 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

**Endotoxin**

Less than 1.0 EU per µg by the LAL method.

**Purity**

&gt;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.

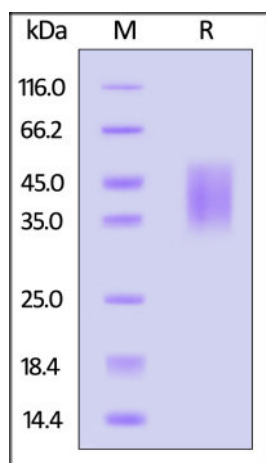
*For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.***Storage**

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:

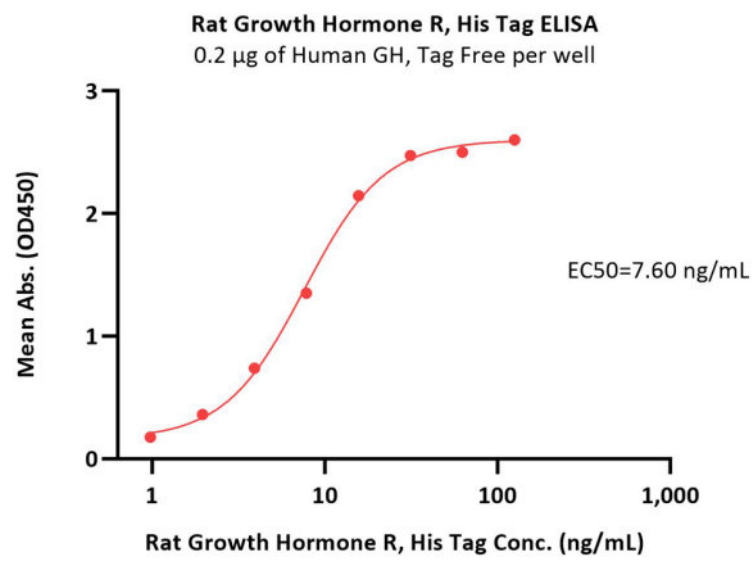
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

**SDS-PAGE**

Rat Growth Hormone R, His Tag on SDS-PAGE under reducing (R) condition.

The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

**Bioactivity-ELISA**



Immobilized Human GH, Tag Free at 2 µg/mL (100 µL/well) can bind Rat Growth Hormone R, His Tag (Cat. No. GHR-R52H8) with a linear range of 1-16 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 / 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.