

Synonym

Glucagon R, GCGR,Glucagon receptor

Source

Human GCGR Protein, Fc Tag(GCR-H53H3) is expressed from CHO cells. It contains AA Ala 26 - Lys 136 (Accession # [P47871-1](#)).

Predicted N-terminus: Ala 26

Molecular Characterization

GCGR(Ala 26 - Lys 136) P47871-1	Fc(Pro 100 - Lys 330) P01857
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This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 39.5 kDa. The protein migrates as 52-62 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 0.01 EU per µg 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

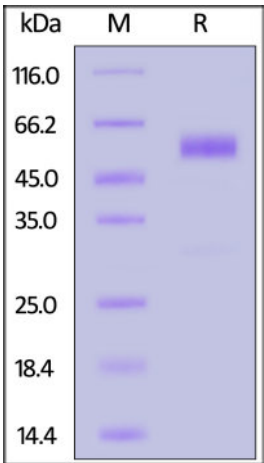
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

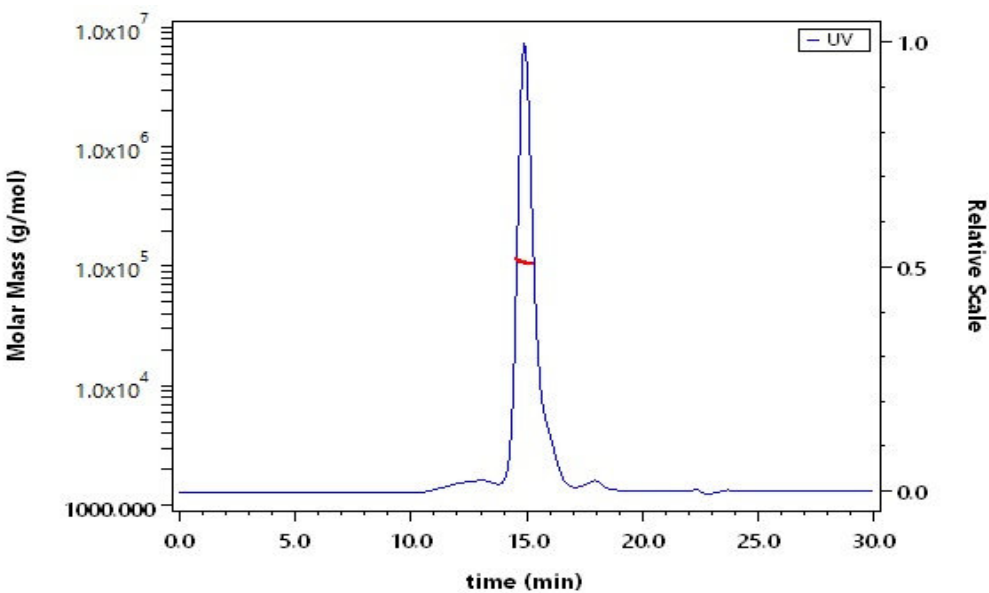
- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human GCGR Protein, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

SEC-MALS

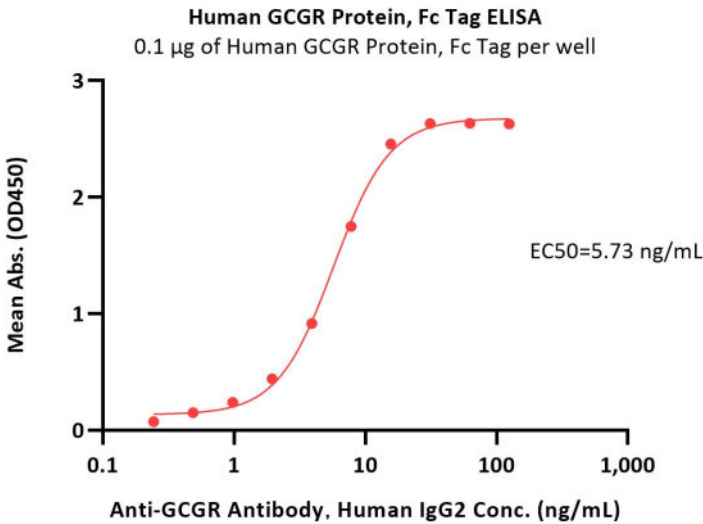
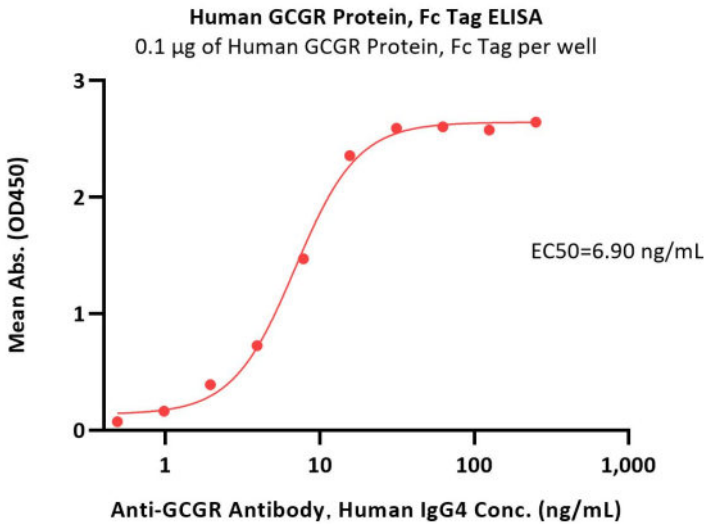


The purity of Human GCGR Protein, Fc Tag (Cat. No. GCR-H53H3) is more than 90% and the molecular weight of this protein is around 100-115 kDa verified by SEC-MALS.

[Report](#)

Bioactivity-ELISA

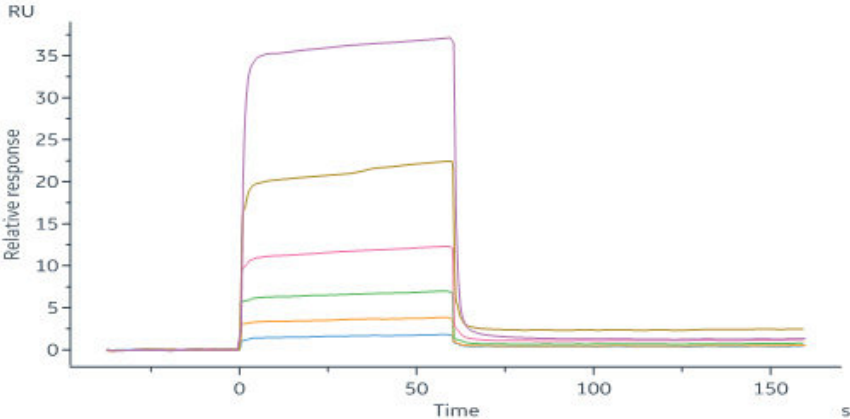




Immobilized Human GCGR Protein, Fc Tag (Cat. No. GCR-H53H3) at 1 µg/mL (100 µL/well) can bind Anti-GCGR Antibody, Human IgG4 with a linear range of 0.5-16 ng/mL (QC tested).

Immobilized Human GCGR Protein, Fc Tag (Cat. No. GCR-H53H3) at 1 µg/mL (100 µL/well) can bind Anti-GCGR Antibody, Human IgG2 with a linear range of 0.2-16 ng/mL (Routinely tested).

Bioactivity-SPR



Human GCGR Protein, Fc Tag (Cat. No. GCR-H53H3) immobilized on CM5 Chip can bind GLP-1 (7-37) with an affinity constant of 51.1 µM as determined in a SPR assay (Biacore 8K) (Routinely tested).

Background

G-protein coupled receptor for glucagon that plays a central role in the regulation of blood glucose levels and glucose homeostasis. Regulates the rate of hepatic glucose production by promoting glycogen hydrolysis and gluconeogenesis. Plays an important role in mediating the responses to fasting. Ligand binding causes a conformation change that triggers signaling via guanine nucleotide-binding proteins (G proteins) and modulates the activity of down-stream effectors, such as adenylate cyclase. Promotes activation of adenylate cyclase. Besides, plays a role in signaling via a phosphatidylinositol-calcium second messenger system.

