

Human GCGR/Glucagon receptor Protein

Cat. No. GCR-HM10R

Description

Source	Recombinant Human GCGR/Glucagon receptor Protein is expressed from HEK293 with His tag at the C-terminus. It contains Ala26-Lys136.
Accession	P47871
Molecular Weight	The protein has a predicted MW of 14.67 kDa. Due to glycosylation, the protein migrates to 32-52 kDa based on Bis-Tris PAGE result.
Endotoxin	Less than 0.1 EU per µg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage

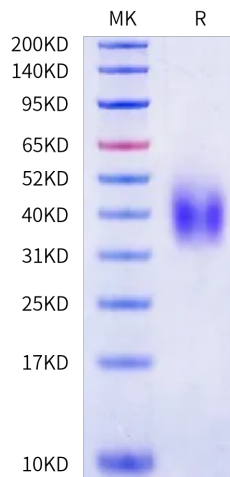
Formulation	Lyophilized from 0.22 µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Background

The pancreatic hormone glucagon activates the glucagon receptor (GCGR), a class B seven-transmembrane G protein-coupled receptor that couples to the stimulatory heterotrimeric G protein and provokes PKA-dependent signaling cascades vital to hepatic glucose metabolism and islet insulin secretion. The GCGR expressed at the plasma membrane is constitutively ubiquitinated and upon agonist-activation, internalized GCGRs are deubiquitinated at early endosomes and recycled via Rab4-containing vesicles.

Assay Data

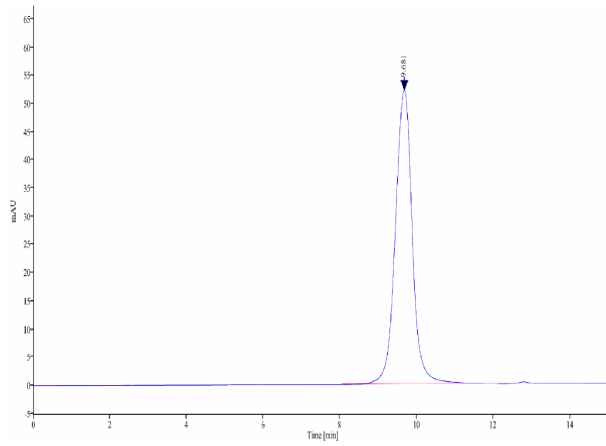
Bis-Tris PAGE



Human GCGR on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

SEC-HPLC

Assay Data



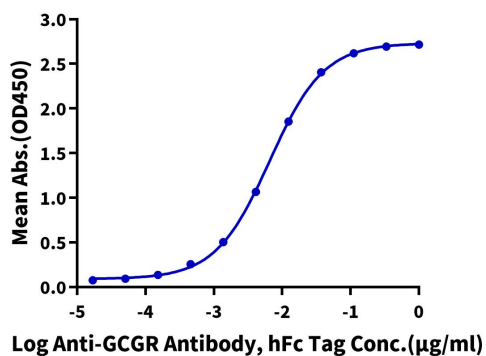
The purity of Human GCGR is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

Human GCGR, His Tag ELISA

0.05µg Human GCGR, His Tag Per Well



Immobilized Human GCGR, His Tag at 0.5µg/ml (100µl/well) on the plate. Dose response curve for Anti-GCGR Antibody, hFc Tag with the EC50 of 6.5ng/ml determined by ELISA.