

# Human GCGR/Glucagon receptor Protein

Cat. No. GCR-HM40R

## Description

<b>Source</b>	Recombinant Human GCGR/Glucagon receptor Protein is expressed from HEK293 with His tag and Avi tag at the C-terminus. It contains Ala26-Lys136.
<b>Accession</b>	P47871
<b>Molecular Weight</b>	The protein has a predicted MW of 15.96 kDa. Due to glycosylation, the protein migrates to 30-50 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per $\mu\text{g}$ by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

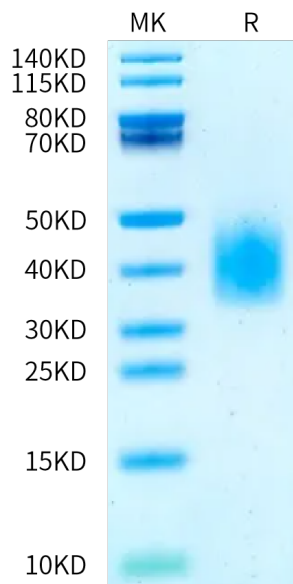
<b>Formulation</b>	Lyophilized from 0.22 $\mu\text{m}$ filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-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

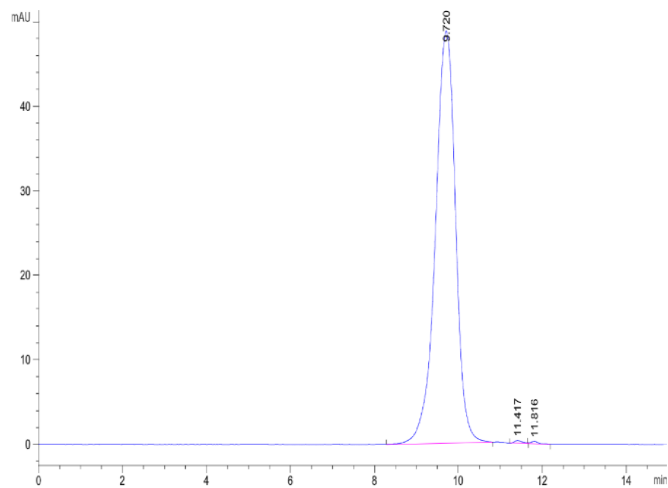
### Bis-Tris PAGE



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.