

Human GCGR(26-136) Protein; His Tag

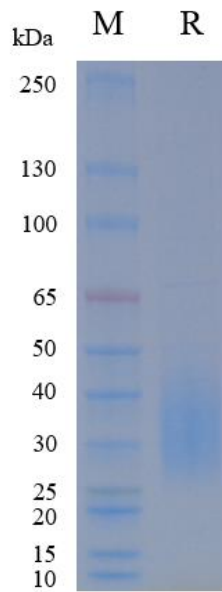
Product Information

Product Name	Human GCGR(26-136) Protein; His Tag
Storage temp	Store at $\leq -70^{\circ}\text{C}$, stable for 6 months after receipt. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.
Catalog# / Size	GM-88497RP-100 / 100 μg GM-88497RP-1000 / 1 mg

Protein Information

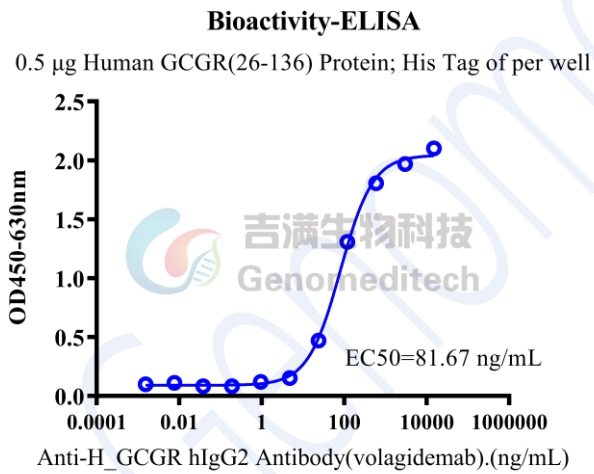
Alternative Names	Glucagon R, GCGR, Glucagon receptor
Source	Human GCGR(26-136) Protein; His Tag (GM-88497RP) is expressed from human 293 cells (HEK-293). It contains AA Ala 26 - Lys 136 (Accession # P47871-1). This protein carries a His tag at the C-terminus.
Purity	> 90% as determined by SDS-PAGE
Endotoxin	< 1 EU/ μg , determined by LAL gel clotting assay
Predicted Mol Mass	13.9 KDa
Formulation	Supplied as a 0.2 μm filtered solution of PBS, pH7.2-7.4.
Description	GCGR (glucagon receptor) is a liver-enriched G protein-coupled receptor (GPCR) whose primary ligand is glucagon. When glucagon binds to GCGR, the receptor activates the Gs signaling pathway, coupling receptor activation to downstream metabolic regulation. This makes GCGR an important molecular target in maintaining glucose homeostasis and in diseases such as diabetes. In the signaling pathway, Gs stimulates adenylyl cyclase (AC), leading to increased intracellular cAMP. Elevated cAMP activates protein kinase A (PKA), which phosphorylates key regulators and promotes transcriptional programs that enhance gluconeogenesis and glycogen breakdown in the liver. These events ultimately increase glucose output, and the GCGR/cAMP-PKA axis may also interface with transcription factors such as CREB and other signaling networks to fine-tune the metabolic response.

SDS-PAGE



On SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-ELISA



Human GCGR(26-136) Protein; His Tag (Catalog # GM-88497RP) was immobilized at 5 $\mu\text{g}/\text{ml}$ (100 $\mu\text{L}/\text{well}$). Increasing concentrations of Anti-H_GCGR hIgG2 Antibody (volagidemab) (Catalog # GM-84555AB) were added.