

Human GCGR(26-136) Protein; hFc Tag

Product Information

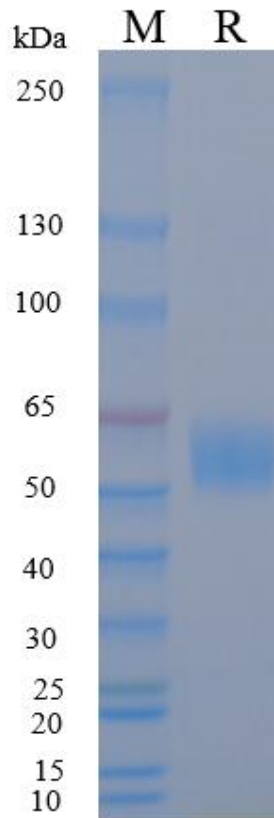
Product Name	Human GCGR(26-136) Protein; hFc Tag
Storage temp	Store at $\leq -70^{\circ}\text{C}$, stable for 6 months after receipt. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.
Catalog# / Size	GM-88750RP-100 / 100 μg GM-88750RP-1000 / 1 mg

Protein Information

Alternative Names	Glucagon R, Glucagon receptor
Source	Human GCGR(26-136) Protein; hFc Tag (GM-88750RP) is expressed from human 293 cells (HEK-293). It contains AA Ala 26 - Lys 136 (Accession # P47871-1). This protein carries a hFc tag at the C-terminus.
Purity	> 95% as determined by SDS-PAGE
Endotoxin	< 1 EU/ μg , determined by LAL gel clotting assay
Predicted Mol Mass	39.0 kDa
Formulation	Supplied as a 0.2 μm filtered solution of PBS, pH7.2-7.4.
Description	GCGR protein, full name Glucagon Receptor, also known as GGR or GL-R, is an important G protein-coupled receptor (GPCR) and a member of the class B secretin-like family of peptide hormone receptors. GCGR protein plays a crucial role in regulating glucose homeostasis and energy metabolism by binding to its endogenous ligand glucagon, thereby activating adenylate cyclase and downstream cAMP/PKA signaling pathways to stimulate hepatic glycogenolysis, gluconeogenesis, and lipid oxidation in normal physiological conditions. Currently, GCGR-targeted therapeutic strategies have shown significant clinical promise, with glucagon receptor antagonists (e.g., LY2409021, PF-06291874) and dual or triple agonists targeting GCGR, GLP-1R, and GIPR (e.g., Cotadutide, SAR425899, and retatrutide) being actively investigated in clinical trials for the treatment of T2DM, obesity, and metabolic dysfunction-associated steatohepatitis (MASH). In summary, GCGR protein plays a pivotal role in glucose metabolism and metabolic disease pathogenesis, and holds great significance for understanding metabolic regulation, identifying novel drug targets, developing glucagon-based therapeutics and multi-agonists, and evaluating patient prognosis in diabetes and obesity-related disorders.

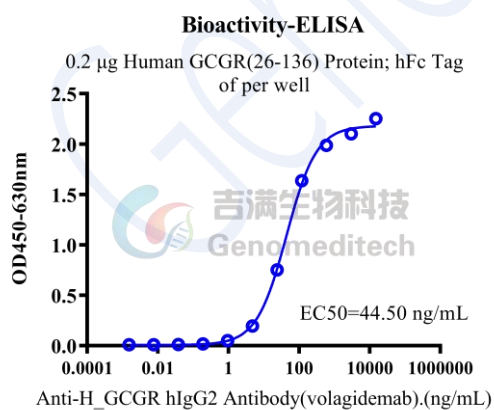
Version:4.0

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 95%.

Bioactivity-ELISA



Human GCGR(26-136) Protein; hFc Tag (Catalog # GM-88750RP) was immobilized at 2 µg/ml (100 µL/well).

Increasing concentrations of Anti-H_GCGR hIgG2 Antibody (volagidemab) (Catalog # GM-84555AB) were added.