Recombinant GLR protein (His tag)

Catalog Number	537762
Synonyms	GL-R
Species	Human
Expression System	E. coli
Accession	P47871
Molecular Weight	Predictes a molecular mass of 14.71 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 15 kDa band.

Product Information

Sequence Region	26-136
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 26-136 aa (P47871) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human Glucagon Receptor Fragment (GL-R, residues 26-136) - A high-quality, soluble protein fragment ideal for structural studies and functional assays targeting glucose metabolism pathways. This 111-amino acid fragment represents a stable domain of the glucagon receptor, optimized for research applications requiring reliable protein performance. The full-length glucagon receptor (GCGR) is a G-protein coupled receptor that plays a central role in blood glucose regulation and glucose homeostasis. It mediates hepatic glucose production by promoting glycogen hydrolysis and gluconeogenesis, particularly during fasting conditions. Upon glucagon binding, the receptor undergoes conformational changes that activate downstream signaling through guanine nucleotide-binding proteins (G proteins), modulating adenylate cyclase activity and promoting a phosphatidylinositol-calcium second messenger system. The receptor is localized to the cell membrane as a multi-pass membrane protein and undergoes rapid internalization following ligand binding, making it a critical regulator of metabolic responses and an important therapeutic target for diabetes research.