Recombinant GLUC protein (His tag)

Catalog Number	537400
Synonyms	GRPP; OXM; OXY; GLP-1; Incretin hormone; 7-37; GLP-1(7-37); 7-36; GLP-1(7-36); GLP-2
Species	Human
Expression System	E. coli
Accession	P01275
Molecular Weight	Predictes a molecular mass of 15.87 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 17 kDa band.

Product Information

Sequence Region	60-180
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 60-180 aa (P01275) 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 Pro-glucagon Fragment (residues 60-180) is a high-purity, stable protein fragment derived from the human GCG gene, designed for structural and biochemical studies. This 121-amino acid fragment, produced using recombinant technology, offers researchers a soluble and functional unit ideal for investigating the complex roles of pro-glucagon-derived peptides in glucose metabolism, insulin regulation, and intestinal growth. The full-length pro-glucagon protein, encoded by the GCG gene in Homo sapiens, is a precursor cleaved into multiple bioactive peptides with critical roles in metabolism and homeostasis. Glucagon acts as a key regulator of blood glucose by increasing gluconeogenesis and serves as a counterregulatory hormone to insulin, particularly in diabetic hyperglycemia. Glucagon-like peptide 1 (GLP-1) stimulates glucose-dependent insulin secretion, suppresses satiety, and promotes pancreatic beta cell proliferation while inhibiting apoptosis. Glucagon-like peptide 2 (GLP-2) supports intestinal growth by enhancing villus height, crypt cell proliferation, and nutrient assimilation. Additional peptides like oxyntomodulin reduce food intake and inhibit gastric emptying, while glicentin may modulate gastric acid secretion and intestinal mucosal development. These peptides are secreted and function in extracellular environments, underscoring their relevance in endocrine and gastrointestinal research.