



# Recombinant Human Pro-glucagon (GCG), partial

<b>Product Code</b>	CSB-YP009315HU
<b>Relevance</b>	<p>Glucagon plays a key role in glucose metabolism and homeostasis. Regulates blood glucose by increasing gluconeogenesis and decreasing glycolysis. A counterregulatory hormone of insulin, raises plasma glucose levels in response to insulin-induced hypoglycemia. Plays an important role in initiating and maintaining hyperglycemic conditions in diabetes. GLP-1 is a potent stimulator of glucose-dependent insulin release. Play important roles on gastric motility and the suppression of plasma glucagon levels. May be involved in the suppression of satiety and stimulation of glucose disposal in peripheral tissues, independent of the actions of insulin. Have growth-promoting activities on intestinal epithelium. May also regulate the hypothalamic pituitary axis (HPA) via effects on LH, TSH, CRH, oxytocin, and vasopressin secretion. Increases islet mass through stimulation of islet neogenesis and pancreatic beta cell proliferation. Inhibits beta cell apoptosis. GLP-2 stimulates intestinal growth and up-regulates villus height in the small intestine, concomitant with increased crypt cell proliferation and decreased enterocyte apoptosis. The gastrointestinal tract, from the stomach to the colon is the principal target for GLP-2 action. Plays a key role in nutrient homeostasis, enhancing nutrient assimilation through enhanced gastrointestinal function, as well as increasing nutrient disposal. Stimulates intestinal glucose transport and decreases mucosal permeability. Oxyntomodulin significantly reduces food intake. Inhibits gastric ptying in humans. Suppression of gastric ptying may lead to increased gastric distension, which may contribute to satiety by causing a sensation of fullness. Glicentin may modulate gastric acid secretion and the gastro-pyloro-duodenal activity. May play an important role in intestinal mucosal growth in the early period of life.</p>
<b>Abbreviation</b>	Recombinant Human GCG protein, partial
<b>Storage</b>	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
<b>Uniprot No.</b>	P01275
<b>Alias</b>	Incretin hormone Glucagon-like peptide 1(7-37) ;GLP-1(7-37) Glucagon-like peptide 1(7-36) ;GLP-1(7-36) Glucagon-like peptide 2 ;GLP-2
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Purity</b>	Greater than 90% as determined by SDS-PAGE.
<b>Sequence</b>	HSQGTFTSDYSKYLDSRRAQDFVQWLMNTRNRNIA
<b>Source</b>	Yeast
<b>Target Names</b>	GCG



**Protein Names** Recommended name: Glucagon  
 Cleaved into the following 8 chains: 1. Glicentin  
 2. Glicentin-related polypeptide Short name=  
 3. GRPP 4. Oxyntomodulin Short name=  
 5. OXM Short name= 6. OXY 7. Glucagon 8. Glucagon-like peptid

**Expression Region** 53-89aa

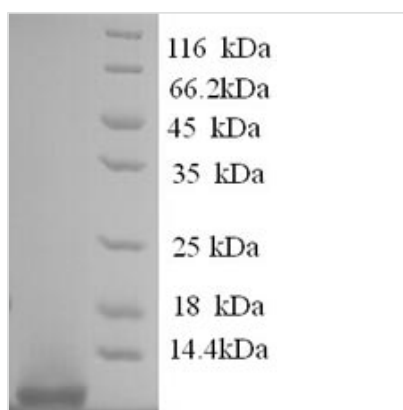
**Notes** Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

**Tag Info** N-terminal 6xHis-tagged

**Mol. Weight** 6.4kDa

**Protein Length** Partial

**Image**



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

**Reconstitution** We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

**Shelf Life** The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.