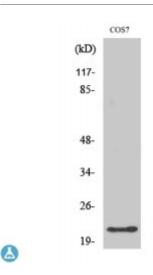


Anti-GCG antibody



Description Rabbit polyclonal to GCG.

Model STJ93236

Host Rabbit

Reactivity Human, Mouse, Rat, Simian

Applications ELISA, IF, IHC, WB

Immunogen Synthesized peptide derived from human GCG

Immunogen Region 30-110 aa, Internal

Gene ID <u>2641</u>

Gene Symbol GCG

Dilution range WB 1:500-1:2000IHC 1:100-1:300IF 1:200-1:1000ELISA 1:40000

Specificity GCG Polyclonal Antibody detects endogenous levels of GCG protein.

Tissue Specificity Glucagon is secreted in the A cells of the islets of Langerhans. GLP-1, GLP-2,

oxyntomodulin and glicentin are secreted from enteroendocrine cells throughout the gastrointestinal tract. GLP-1 and GLP-2 are also secreted in

selected neurons in the brain.

Purification The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Note For Research Use Only (RUO).

Protein Name Glucagon Glicentin Glicentin-related polypeptide GRPP Oxyntomodulin

OXM OXY Glucagon Glucagon-like peptide 1 GLP-1 Incretin hormone

Glucagon-like peptide 1 01/07/37 GLP-1

Molecular Weight 25 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Concentration 1 mg/ml

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links HGNC:41910MIM:138030

Alternative Names Glucagon Glicentin Glicentin-related polypeptide GRPP Oxyntomodulin

OXM OXY Glucagon Glucagon-like peptide 1 GLP-1 Incretin hormone

Glucagon-like peptide 1 01/07/37 GLP-1

Function 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

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 emptying in humans. Suppression of gastric emptying 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.

Cellular Localization

Secreted.

Post-translational Modifications Proglucagon is post-translationally processed in a tissue-specific manner in pancreatic A cells and intestinal L cells. In pancreatic A cells, the major bioactive hormone is glucagon cleaved by PCSK2/PC2. In the intestinal L cells PCSK1/PC1 liberates GLP-1, GLP-2, glicentin and oxyntomodulin. GLP-1 is further N-terminally truncated by post-translational processing in the intestinal L cells resulting in GLP-1(7-37) GLP-1-(7-36)amide. The C-terminal amidation is neither important for the metabolism of GLP-1 nor for its effects on the endocrine pancreas.

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