

Rabbit Anti-GLP-1 antibody

SL0933R

Product Name GLP-1

Chinese Name 胰高血糖素样肽-1 抗体

Alias GCG; GLP 1; glucagon; Glucagon like peptide 1; GRPP; GLP-1(7-36); GLP-1(7-37); Oxyntomodulin; OXM; OXY; GLUC_HUMAN

Research Area Tumour Cardiovascular immunology Neurobiology Signal transduction Channel protein
Diabetes Endocrinopathy The new supersedes the old

Immunogen Species Rabbit

Clonality Polyclonal

React Species Human, Mouse, Rat,

Applications IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 (Paraffin sections need antigen repair)
not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.

Theoretical molecular weight 21kDa

Cellular localization Secretory protein

Form Liquid

Concentration 1mg/ml

immunogen KLH conjugated synthetic peptide derived from human GLP-1: 1-31/31

Lsotype IgG

Purification affinity purified by Protein A

Buffer Solution 1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.

Storage Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

Attention This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

PubMed [PubMed](#)

Product The protein encoded by this gene is actually a preproprotein that is cleaved into four distinct

Detail

mature peptides. One of these, glucagon, is a pancreatic hormone that counteracts the glucose-lowering action of insulin by stimulating glycogenolysis and gluconeogenesis. Glucagon is a ligand for a specific G-protein linked receptor whose signalling pathway controls cell proliferation. Two of the other peptides are secreted from gut endocrine cells and promote nutrient absorption through distinct mechanisms. Finally, the fourth peptide is similar to glicentin, an active enteroglucagon. [provided by RefSeq].

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 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.

Subunit:

Secreted.

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. GLP1 and GLP2 are also secreted in selected neurons in the brain.

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.

Similarity:

Belongs to the glucagon family.

SWISS:

P01275

Gene ID:

2641

Database links:

[Entrez Gene: 2641](#) Human

[Entrez Gene: 14526](#) Mouse

[Entrez Gene: 24952](#) Rat

[Omim: 138030](#) Human

[SwissProt: P01275](#) Human

[SwissProt: P55095](#) Mouse

[SwissProt: P06883](#) Rat

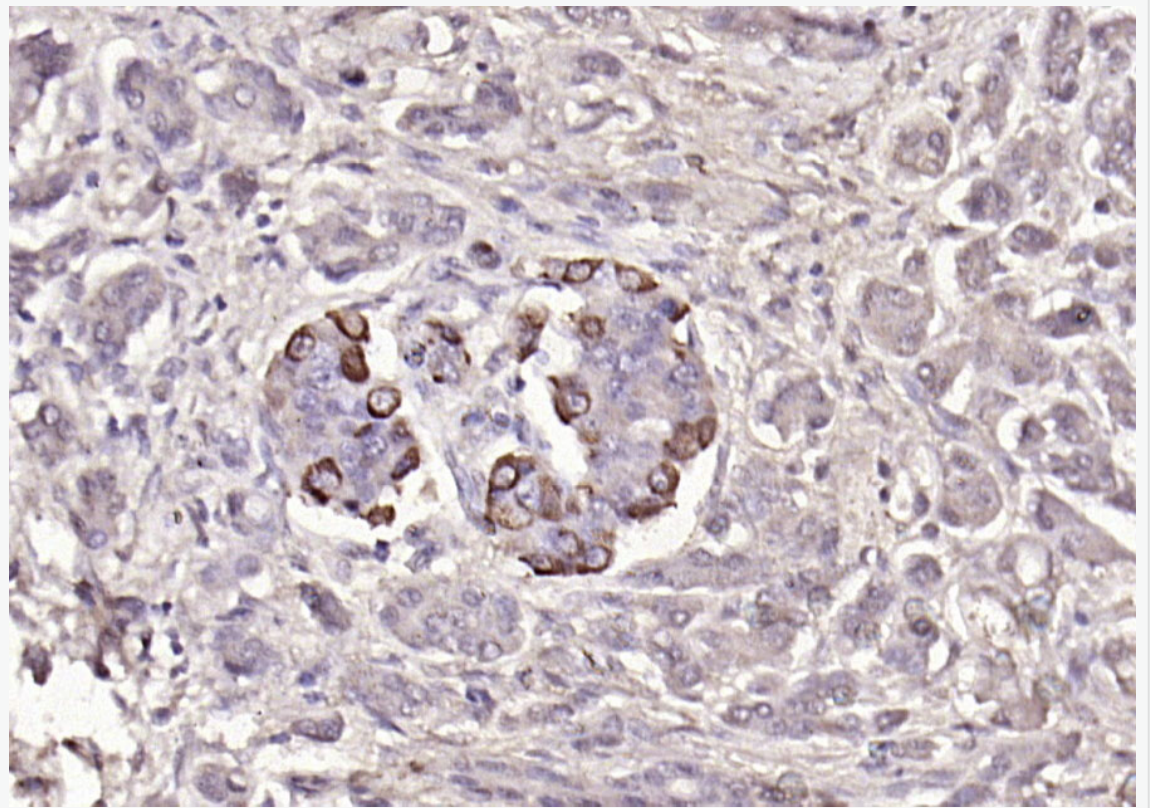
[Unigene: 516494](#) Human

[Unigene: 45494](#) Mouse

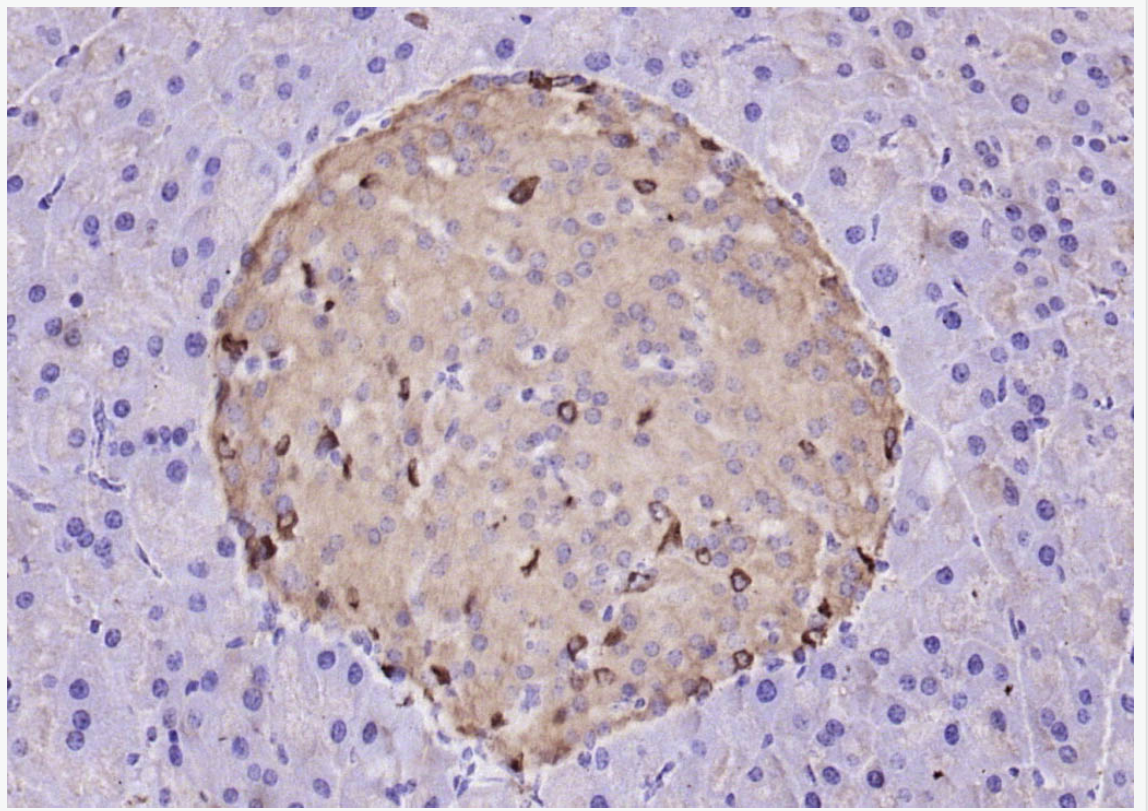
[Unigene: 54383](#) Rat

胰高血糖素（Glucagon）在糖代谢和体内平衡中起重要作用，通过释放糖原和糖酵解调节血糖。作为反调节激素的胰岛素，当血糖升高时，胰岛素可诱导低血糖。胰高血糖素样肽-1（Glucagon-like peptide-1, GLP-1）是一个具有强的刺激糖依赖的胰岛素释放的肽，在胃运动性和抑制血糖水平上起重要作用。还可能参与外周组织糖的控制，不依赖胰岛素的作用。具有促进肠上皮生长等作用。GLP-1 属于胰高血糖素家族成员。

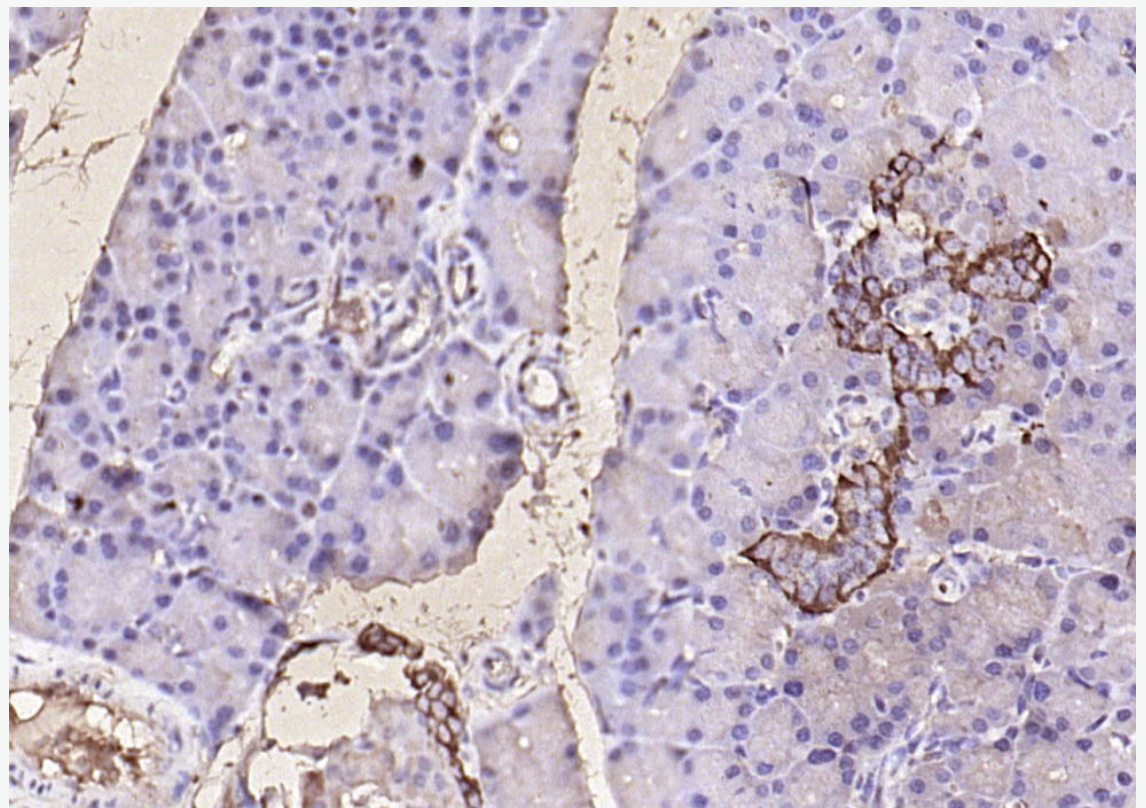
**Product
Picture**



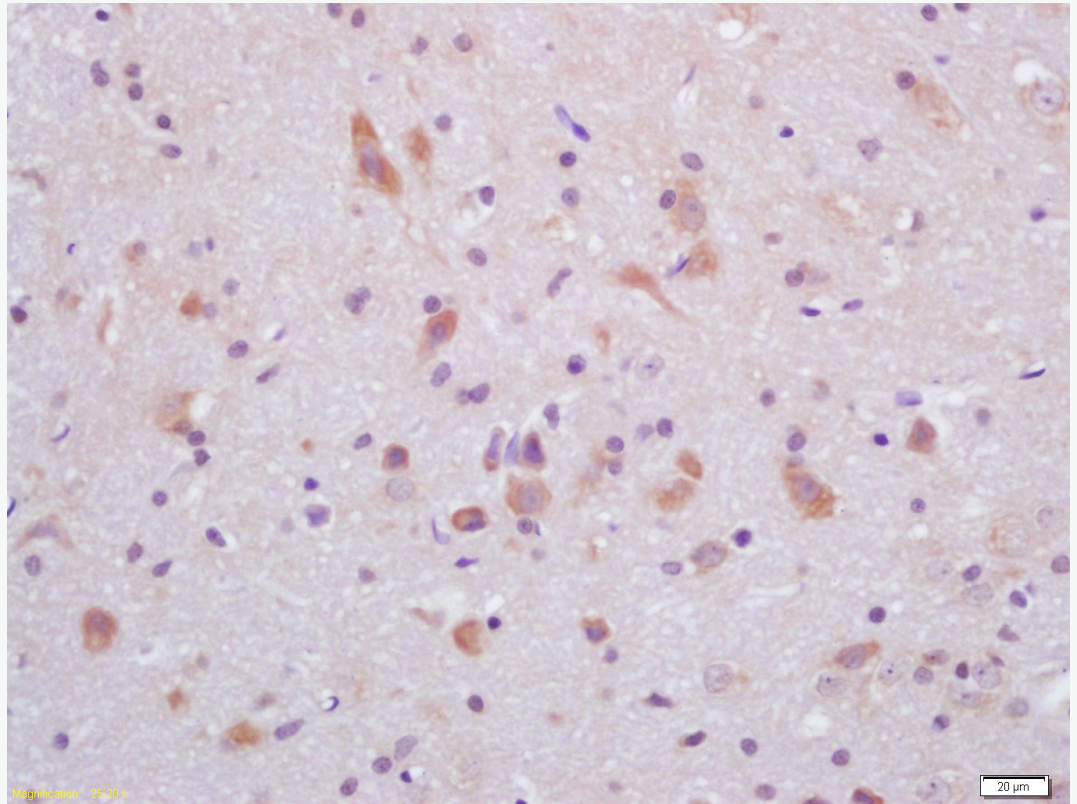
Paraformaldehyde-fixed, paraffin embedded (human pancreatic cancer); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (GLP-1) Polyclonal Antibody, Unconjugated (SL0933R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (rat pancreas); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (GLP-1) Polyclonal Antibody, Unconjugated (SL0933R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (mouse pancreas); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (GLP-1) Polyclonal Antibody, Unconjugated (SL0933R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (1M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;
Incubation: Anti-GLP-1 Polyclonal Antibody, Unconjugated(SL0933R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining