



Rabbit Anti-Proinsulin antibody

SL0056R

Product Name:	Proinsulin
Chinese Name:	胰岛素原抗体
Alias:	INS_HUMAN; ILPR; INS; Insulin A chain; Insulin precursor; IRDN; Proinsulin; Proinsulin precursor.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Pig,Cow,Horse,Rabbit,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	5.8/12kDa
Cellular localization:	Secretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Insulin:46-59/110
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Insulin is a pancreatic hormone that regulates glucose and is involved in the synthesis of protein and fat. It increases cell permeability to monosaccharides, amino acids and fatty acids. It accelerates glycolysis, the pentose phosphate cycle, and glycogen synthesis in liver. Heterodimer of a B chain and an A chain linked by two disulfide bonds.Belongs to the insulin family. The insulin-link growth factors, IGF-I and IGF-II (also desinated somatomedin C and multiplication stimulating activator, respectively), share

approximately 76% sequence identity and are 50% related to pro-insulin. IGF-I and IGF-II are nonglycosylated, single chain proteins of 70 and 76 amino acids in length, respectively. IGF-I functions as an autocrine regulator of growth in various, whereas the function of IGF-II is less well defined.

Function:

Insulin decreases blood glucose concentration. It increases cell permeability to monosaccharides, amino acids and fatty acids. It accelerates glycolysis, the pentose phosphate cycle, and glycogen synthesis in liver.

Subunit:

Heterodimer of a B chain and an A chain linked by two disulfide bonds.

Subcellular Location:

Secreted.

DISEASE:

Defects in INS are the cause of familial hyperproinsulinemia (FHPRI) [MIM:176730]. Defects in INS are a cause of diabetes mellitus insulin-dependent type 2 (IDDM2) [MIM:125852]. IDDM2 is a multifactorial disorder of glucose homeostasis that is characterized by susceptibility to ketoacidosis in the absence of insulin therapy. Clinical features are polydipsia, polyphagia and polyuria which result from hyperglycemia-induced osmotic diuresis and secondary thirst. These derangements result in long-term complications that

Defects in INS are a cause of diabetes mellitus permanent neonatal (PNDM) [MIM:606176]. PNDM is a rare form of diabetes distinct from childhood-onset autoimmune diabetes mellitus type 1. It is characterized by insulin-requiring hyperglycemia that is diagnosed within the first months of life. Permanent neonatal diabetes requires lifelong therapy.

Similarity:

Belongs to the insulin family.

SWISS:

P01308

Gene ID:

3630

Database links:

[Entrez Gene: 3630](#)Human

[Entrez Gene: 280829](#)Cow

[Entrez Gene: 16333](#)Mouse

[Entrez Gene: 16334](#)Mouse

[Entrez Gene: 24505](#)Rat

[Entrez Gene: 397415](#)Pig

[Omim: 176730](#)Human

[SwissProt: P01308](#)Human

[SwissProt: P01325](#)Mouse

[SwissProt: P01322](#)Rat

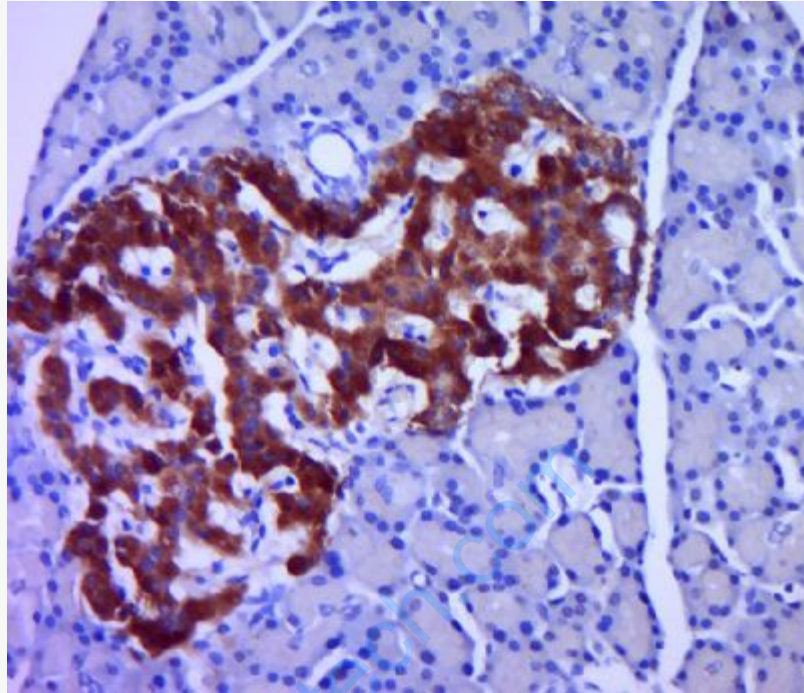
[SwissProt: P01315](#)Pig

[Unigene: 272259](#)Human

Important Note:

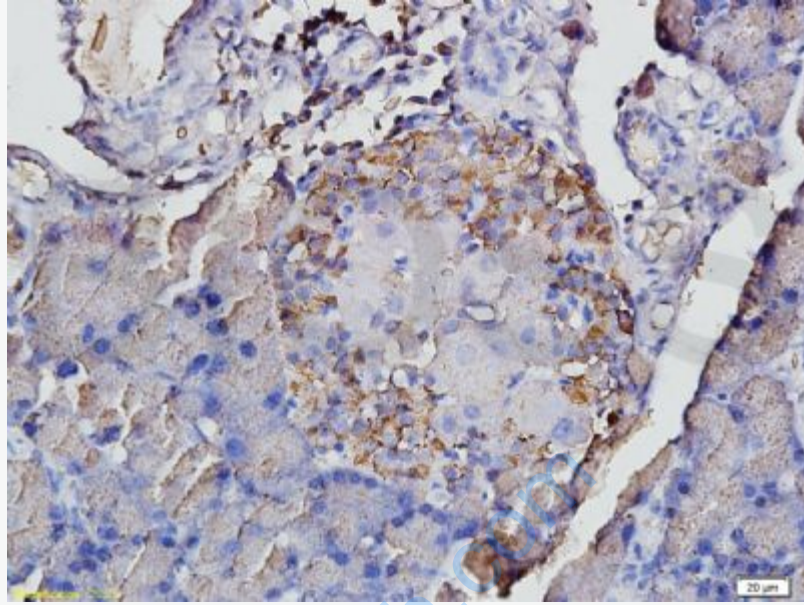
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

胰岛素 (Insulin) 胰岛素抗体是胰岛细胞分泌得一种激素, 可以减低血糖浓度。此抗体和人胰岛素反应, 并与大多数哺乳类动物的胰岛素有 React Species, 主要用于胰岛细胞瘤的功能性研究。

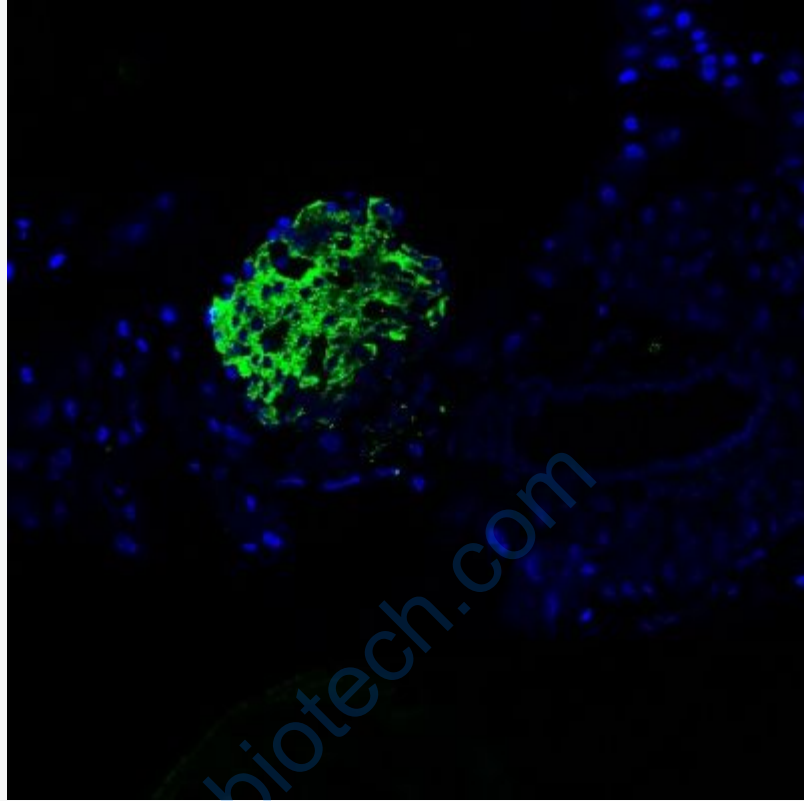


Picture:

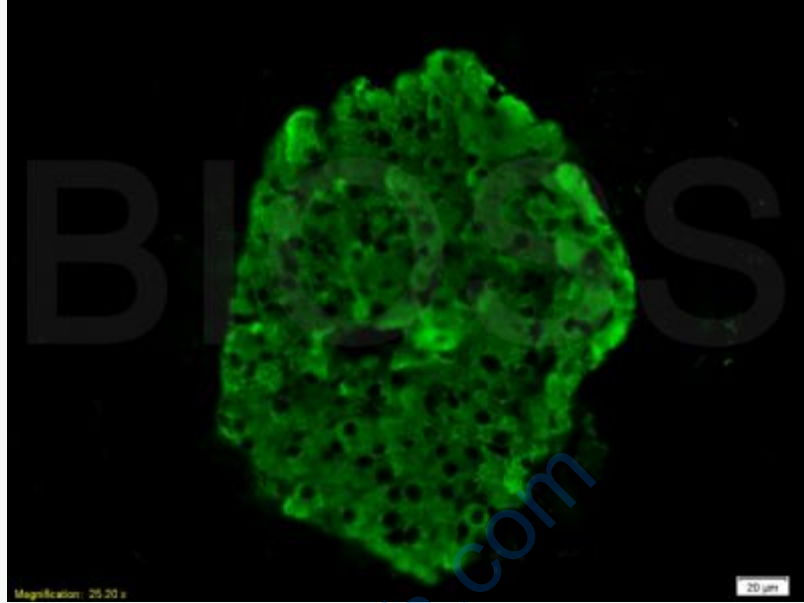
Paraformaldehyde-fixed, paraffin embedded (rat pancreas tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Proinsulin) Polyclonal Antibody, Unconjugated (SL0056R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Tissue/cell: rat pancreas tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, 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-Insulin Polyclonal Antibody, Unconjugated(SL0056R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Mouse Pancreas (C57BL/6 strain) fixed in 4% PFA for 2 hours at RT, then transferred to 30% sucrose overnight at 4°C. Treated with TBS containing 5% goat serum and 0.3% Triton X-100, to block unspecific binding sites and permeabilize cell membranes, for 30min at RT. Antibody (SL0056R) diluted at 1:100 in TBS containing 2% goat serum applied and incubated overnight at 4°C. Rinse sections in TBS 2x5min on a shaker, mount section with vectorshield (with DAPI), then cover them with coverslips and seal the edge of the coverslip on the slide with nail polish.



Tissue/cell: rat pancreas tissue;4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min;
Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;
Incubation: Anti-Insulin Polyclonal Antibody, Unconjugated(SL0056R) 1:200,
overnight at 4°C; The secondary antibody was Goat Anti-Rabbit IgG, FITC
conjugated(SL0056R)used at 1:200 dilution for 40 minutes at 37°C.