

# Rabbit Anti-Insulin antibody

# SL0862R

<b>Product Name:</b>	Insulin
Chinese Name:	胰岛素抗体
Alias:	ILPR; INS; Insulin A chain; Insulin B chain; Insulin A chain; Insulin precursor; IRDN; Proinsulin; Proinsulin precursor; IDDM2; INS HUMAN; MODY10.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Pig,
Applications:	WB=1:500-2000ELISA=1:500-1000IP=1:20-100 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	5.77754kDa
Cellular localization:	Secretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	porcine pancreas, full length:
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:	<u>PubMed</u>
Product Detail:	Insulin is one of the major regulatory hormones of intermediate metabolism throughout the body. The biological actions of this hormone involve integration of carbohydrate, protein, and lipid metabolism. Insulin enhances membrane transport of glucose, amino acids, and certain ions. It also promotes glycogen storage, formation of triglycerides and synthesis of proteins and nucleic acids. Immunocytochemical investigations have localized insulin in the B cells of pancreatic islets of Langerhans. Deficiency of insulin results in diabetes mellitus, one of the leading causes of morbidity and mortality in the

general population. Insulin is also present in tumors of B cell origin such as insulinoma.

#### 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:**

Hyperproinsulinemia, familial (FHPRI) [MIM:176730]: An autosomal dominant condition characterized by elevated levels of serum proinsulin-like material. Note=The disease is caused by mutations affecting the gene represented in this entry. Diabetes mellitus, insulin-dependent, 2 (IDDM2) [MIM:125852]: A multifactorial disorder of glucose homeostasis that is characterized by susceptibility to ketoacidosis in the absence of insulin therapy. Clinical fetaures are polydipsia, polyphagia and polyuria which result from hyperglycemia-induced osmotic diuresis and secondary thirst. These derangements result in long-term complications that affect the eyes, kidneys, nerves, and blood vessels. Note=The disease is caused by mutations affecting the gene represented in this entry.

Diabetes mellitus, permanent neonatal (PNDM) [MIM:606176]: 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. Note=The disease is caused by mutations affecting the gene represented in this entry.

Maturity-onset diabetes of the young 10 (MODY10) [MIM:613370]: A form of diabetes that is characterized by an autosomal dominant mode of inheritance, onset in childhood or early adulthood (usually before 25 years of age), a primary defect in insulin secretion and frequent insulin-independence at the beginning of the disease. Note=The disease is caused by mutations affecting the gene represented in this entry.

#### Similarity:

Belongs to the insulin family.

**SWISS:** 

P01315

Gene ID:

397415

Database links:

Entrez Gene: 3630 Human

Entrez Gene: 280829Cow

Entrez Gene: 16333Mouse

Entrez Gene: 16334Mouse

Entrez Gene: 24505Rat

Entrez Gene: 397415Pig

Omim: 176730Human

SwissProt: P01308Human

SwissProt: P01325Mouse

SwissProt: P01322Rat

SwissProt: P01315Pig

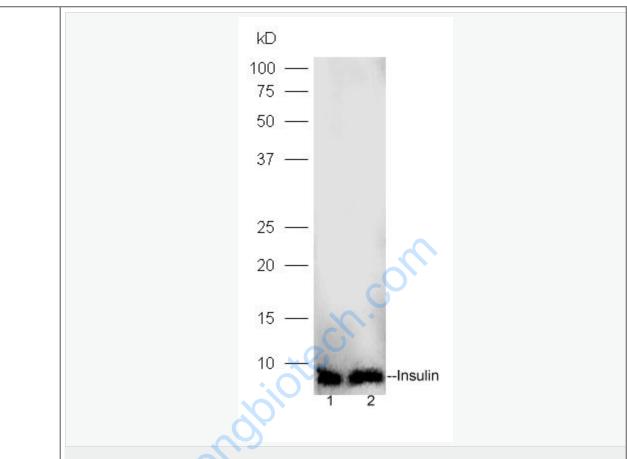
Unigene: 272259Human

## **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)是胰岛beta细胞分泌的一种激素,可以减低血糖浓度。此抗体特异性地识别猪胰岛素,并与人的胰岛素有React

Species, 主要用于胰岛细胞瘤的功能性研究。



Picture:

Sample:

Lane1: Islet A lysates at 20ug;

line2,Islet B lysates at 20ug;

Primary: Anti-Insulin (SL0862R) at 1:300 dilution;

Secondary: HRP conjugated Goat-Anti-rabbit IgG(SL0862R) at 1: 5000 dilution;

Predicted band size:5.8 kD Observed band size:5.8 kD