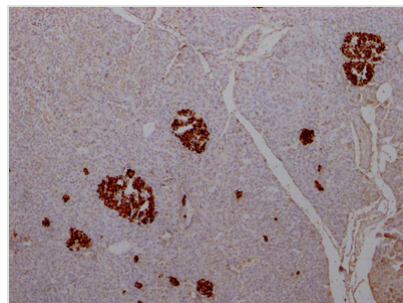




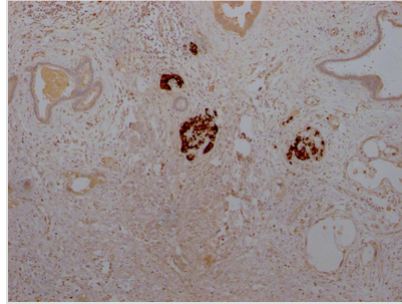
INS Antibody

Product Code	CSB-RA584163A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P01308
Immunogen	A synthesized peptide derived from human Insulin
Species Reactivity	Human
Tested Applications	ELISA, IHC; Recommended dilution: IHC:1:50-1:200
Relevance	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.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Neuroscience; Cancer; Cardiovascular; Metabolism; Signal transduction
Gene Names	INS
Accession NO.	1F6

Image



IHC image of CSB-RA584163A0HU diluted at 1:100 and staining in paraffin-embedded human pancreatic tissue performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.



IHC image of CSB-RA584163A0HU diluted at 1:100 and staining in paraffin-embedded human pancreatic cancer performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

Description

The recombinant INS antibody was prepared by obtaining the antibody genes, cloning the genes into a plasma vector to construct vector clone, transfecting the vector clone into a mammalian cell line for transient expression, and purifying the antibody by affinity-chromatography. This recombinant INS antibody has been verified to detect the INS protein from Human in the ELISA, IHC.

INS is the hormone responsible for maintaining glucose homeostasis in the body by inhibiting gluconeogenesis & glycogenolysis, promoting glycolysis & glycogenesis, stimulating protein synthesis & lipogenesis, and suppressing protein degradation & lipolysis. It is generated and stored in granules within the beta cells of the islets of Langerhans in the pancreas, from which it is released after glucose-induced stimulation. INS binds to the insulin receptor, leading to the receptor autophosphorylation and subsequent activation of multiple signaling pathways including PI3K, phosphoinositide-dependent kinase-1, Akt, mTOR, PKC, and S6K1 pathways, ultimately facilitating glucose uptake. INS helps bone formation and reduces osteoporosis-related inflammation, as well as acting on the central nervous system and exerting pro- and anti-atherogenic roles in the vascular system.