INS Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	INS, Polyclonal Antibody
Full Product Name	INS Antibody
Product Gene Name	anti-INS antibody
Product Synonym Names	IDDM; ILPR; IRDN; IDDM1; IDDM2; MODY10
Clonality	Polyclonal
Isotype	Rabbit IgG
Host	Rabbit
Species Reactivity	Human
Form/Format	Rabbit IgG in pH7.4 PBS, 0.05% NaN3, 40% Glycerol.
Purity/Purification	Antigen affinity purification.
Specificity	The antibody detects endogenous levels of total INS protein.
Preparation and Storage	Store at 4 degree C short term. Aliquot and store at -20 degree C long term. Avoid freeze/thaw cycles.
Molecular Weight	11,981 Da
Chromosome Location	Chromosome: 11; NC_000011.9 (2181009..2182439, complement). Location: 11p15.5
OMIM	125852
3D Structure	ModBase 3D Structure for P01308
Immunogen	Synthetic peptide of human INS
Product Categories/Family for anti-INS antibody	Primary Antibody
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for anti-INS antibody	Immunohistochemistry (IHC)
Application Notes for anti-INS antibody	IHC: 1:25-1:100
Related Product Information for anti-INS antibody	After removal of the precursor signal peptide, proinsulin is post-translationally cleaved into three peptides: the B chain and A chain peptides, which are covalently linked via two disulfide bonds to form insulin, and C-peptide. Binding of insulin to the insulin receptor (INSR) stimulates glucose uptake. A multitude of mutant alleles with phenotypic effects have been identified. There is a read-through gene, INS-IGF2, which overlaps with this gene at the 5' region and with the IGF2 gene at the 3' region. Alternative splicing results in multiple transcript variants
Other Notes	Small volumes of anti-INS antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for INS purchase	MBS8593696 is an antibody targeting INS. Also known as INS Antibody. Reactive in Human. Host: Rabbit.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for INS. It may not necessarily be applicable to this product.

NCBI GI #	386828
NCBI GeneID	3630
NCBI Accession #	AAA59172.1
UniProt Primary Accession #	P01308
UniProt Secondary Accession #	Q5EEX2
UniProt Related Accession #	P01308
NCBI Official Full Name	insulin
NCBI Official Synonym Full Names	insulin
NCBI Official Symbol	INS
NCBI Official Synonym Symbols	ILPR; IRDN; IDDM2; MODY10
UniProt Protein Name	Insulin
Protein Family	Insulin
UniProt Gene Name	INS
UniProt Entry Name	INS_HUMAN
NCBI Protein Information	insulin; proinsulin; preproinsulin
NCBI Summary for INS	After removal of the precursor signal peptide, proinsulin is post-translationally cleaved into three peptides: the B chain and A chain peptides, which are covalently linked via two disulfide bonds to form insulin, and C-peptide. Binding of insulin to the insulin receptor (INSR) stimulates glucose uptake. A multitude of mutant alleles with phenotypic effects have been identified. There is a read-through gene, INS-IGF2, which overlaps with this gene at the 5' region and with the IGF2 gene at the 3' region. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jun 2010]

UniProt Comments for INS	Insulin: 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. Heterodimer of a B chain and an A chain linked by two disulfide bonds. Belongs to the insulin family. Protein type: Secreted, signal peptide; Hormone; Secreted Chromosomal Location of Human Ortholog: 11p15.5 Cellular Component: extracellular space; Golgi lumen; endoplasmic reticulum lumen; extracellular region Molecular Function: insulin-like growth factor receptor binding; identical protein binding; protein binding; protease binding; hormone activity; insulin receptor binding Biological Process: positive regulation of nitric oxide biosynthetic process; positive regulation of vasodilation; glucose homeostasis; activation of NF-kappaB transcription factor; positive regulation of glucose import; negative regulation of protein oligomerization; regulation of protein localization; cell-cell signaling; negative regulation of gluconeogenesis; acute-phase response; regulation of transmembrane transporter activity; negative regulation of NAD(P)H oxidase activity; positive regulation of mitosis; positive regulation of nitric-oxide synthase activity; activation of protein kinase B; negative regulation of acute inflammatory response; glucose metabolic process; positive regulation of lipid biosynthetic process; positive regulation of protein amino acid autophosphorylation; positive regulation of cell growth; positive regulation of phosphoinositide 3-kinase cascade; positive regulation of peptidyl-tyrosine phosphorylation; negative regulation of protein catabolic process; regulation of amino acid metabolic process; positive regulation of cell differentiation; negative regulation of glycogen catabolic process; wound healing; positive regulation of cellular protein metabolic process; positive regulation of glycogen biosynthetic process; glucose transport; regulation of protein secretion; regulation of transcription, DNA-dependent; negative regulation of lipid catabolic process; negative regulation of vasodilation; positive regulation of MAPKKK cascade; positive regulation of cell proliferation; negative regulation of proteolysis; negative regulation of protein secretion; MAPKKK cascade; negative regulation of fatty acid metabolic process; alpha-beta T cell activation; endocrine pancreas development; positive regulation of protein kinase B signaling cascade; G-protein coupled receptor protein signaling pathway; cellular protein metabolic process; fatty acid homeostasis; positive regulation of glycolysis; insulin receptor signaling pathway; energy reserve metabolic process; positive regulation of insulin receptor signaling pathway; regulation of insulin secretion; positive regulation of DNA replication; positive regulation of cytokine secretion; positive regulation of cell migration Disease: Diabetes Mellitus, Insulin-dependent, 2; Diabetes Mellitus, Permanent Neonatal; Hyperproinsulinemia; Maturity-onset Diabetes Of The Young, Type 10
Research Articles on INS	**1.** Elevated C-peptide and insulin predict increased risk of colorectal adenomas in normal mucosa.
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