Insulin (INS) Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	Insulin (INS), Polyclonal Antibody
Full Product Name	Biotin-Linked Antibody to Insulin (INS)
Product Gene Name	anti-INS antibody
Clonality	Polyclonal
Host	Rabbit
Species Reactivity	Human, Mouse, Rat
Form/Format	Supplied as solution form in PBS, pH7.4, containing 0.02% NaN3,50% glycerol.
Purity/Purification	Affinity Chromatography
Concentration	500ug/ml (lot specific)
Specificity	The antibody is a rabbit polyclonal antibody raised against INS conjugated to biotin. It has been selected for its ability to recognize INS in immunohistochemical staining andwestern blotting.
Preparation and Storage	Store at 4 degree C for frequent use. Stored at -20 degree C to -80 degree C in a manual defrost freezer for one year without detectable loss of activity. Avoid repeated freeze-thaw cycles.
Matching Pairs	Unconjugated Antibody: INS (MBS2005709) Biotin Conjugated Antibody: INS (MBS2005906)
Matching Pairs	Biotin Conjugated Antibody: INS (MBS2005906) Immunogen: INS (MBS2031823)
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
Supply Chain Verification	Manufactured in a lab with traceable raw materials. Bulk orders can typically be prepared to the customer's specifications, please inquire.
Product Categories/Family for anti-INS antibody	Biotin Antibody
ISO Certification	Manufactured in an ISO 9001:2015 and ISO 13485:2016 Certified Laboratory.
Applications Tested/Suitable for anti-INS antibody	Immunohistochemistry (IHC), ELISA (EIA), Western Blot (WB)
Application Notes for anti-INS antibody	Western blotting: 1:100-400 Immunocytochemistry in formalin fixed cells: 1:100-500 Immunohistochemistry in formalin fixed frozen section: 1:100-500 Immunohistochemistry in paraffin section: 1:50-200 Enzyme-linked Immunosorbent Assay: 1:100-200
Related Product Information for anti-INS antibody	MBS2005906 is an antibody targeting INS. Also known as Biotin-Linked Antibody to Insulin (INS). Reactive in Human, Mouse, Rat. Host: Rabbit.

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.

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; Secreted, signal peptide; Hormone 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; glucose homeostasis; positive regulation of vasodilation; activation of NF-kappaB transcription factor; negative regulation of protein oligomerization; positive regulation of glucose import; 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 cell growth; positive regulation of protein amino acid autophosphorylation; positive regulation of phosphoinositide 3-kinase cascade; positive regulation of peptidyl-tyrosine phosphorylation; regulation of amino acid metabolic process; positive regulation of cell differentiation; negative regulation of protein catabolic process; negative regulation of glycogen catabolic process; wound healing; positive regulation of glycogen biosynthetic process; positive regulation of cellular protein metabolic process; glucose transport; regulation of protein secretion; regulation of transcription, DNA-dependent; positive regulation of MAPKKK cascade; negative regulation of lipid catabolic process; negative regulation of vasodilation; 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; G-protein coupled receptor protein signaling pathway; positive regulation of protein kinase B signaling cascade; cellular protein metabolic process; fatty acid homeostasis; positive regulation of glycolysis; energy reserve metabolic process; insulin receptor signaling pathway; 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.** Data suggest that apparent up-regulation of insulin secretion in small islets (versus large islets) is due to higher percentage of beta-cells, more beta-cells in contact with blood vessels, and higher content of insulin per beta-cell in small islets.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/polyclonal-human-mouse-rat-antibody/insulin-ins/2005906