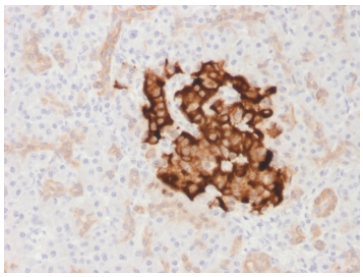
INS Antibody IRDN/1980R / Recombinant Insulin Antibody [clone IRDN/1980R] (V3617)

Catalog No.	Formulation	Size
V3617-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V3617-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V3617SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V3617IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

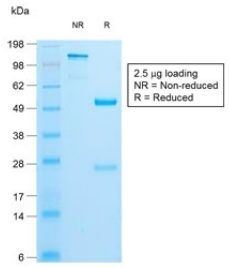
Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human, Mouse
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	IRDN/1980R
Purity	Protein A affinity chromatography
UniProt	P01308
Localization	Cytoplasmic
Applications	Immunohistochemistry (FFPE): 0.5-1ug/ml for 30 min at RT
Limitations	This INS Antibody IRDN/1980R / Recombinant Insulin Antibody is available for research use only.



INS Antibody IRDN/1980R Staining in Human Pancreatic Islets by IHC. Immunohistochemistry staining of FFPE human pancreas using INS Antibody (clone IRDN/1980R) shows strong brown cytoplasmic labeling concentrated within a pancreatic islet, while the surrounding exocrine tissue shows substantially weaker staining. HIER was performed by boiling tissue sections in pH 6 10mM citrate buffer for 10-20 min followed by cooling at RT for 20 min. The localized islet staining is consistent with insulin expression in pancreatic beta cells and demonstrates detection using this Recombinant Insulin Antibody.



INS Antibody IRDN/1980R Purity and Integrity by SDS-PAGE. SDS-PAGE analysis of 2.5 ug purified, BSA-free INS Antibody (clone IRDN/1980R) shows a predominant intact antibody band near 150 kDa under non-reducing conditions. Under reducing conditions, distinct immunoglobulin heavy and light chains are visible at approximately 50 kDa and 25 kDa, respectively. The expected non-reduced and reduced migration patterns support the integrity and purity of this Recombinant Insulin Antibody preparation.

Description

INS Antibody IRDN/1980R recognizes insulin, a peptide hormone that plays a central role in glucose homeostasis and metabolic regulation. Insulin is synthesized primarily by pancreatic beta cells as preproinsulin, which is converted to proinsulin and subsequently processed to produce mature insulin and C-peptide. Mature insulin consists of A and B chains connected by disulfide bonds and is stored within secretory granules until released in response to metabolic signals such as increased blood glucose.

Insulin acts through the insulin receptor to coordinate carbohydrate, lipid, and protein metabolism. Activation of insulin receptor signaling promotes glucose uptake in responsive tissues, stimulates glycogen and lipid synthesis, and regulates pathways involved in cellular growth and metabolic homeostasis. Alterations in insulin production, secretion, or signaling are central to diabetes mellitus and related metabolic disorders, making INS an important target in endocrine and metabolism research.

Within the pancreas, insulin expression is strongly associated with beta cells of the islets of Langerhans. This characteristic distribution makes INS an established marker for investigating pancreatic beta-cell identity, development, differentiation, and function. Insulin expression is also studied in pancreatic neuroendocrine tumors, particularly insulin-producing tumors, supporting research into beta-cell lineage and insulinoma biology.

Clone IRDN/1980R is a recombinant rabbit monoclonal antibody generated against purified porcine insulin conjugated to KLH. This Recombinant Insulin Antibody provides a defined monoclonal reagent for investigating INS expression and complements conventional monoclonal antibodies used in pancreatic beta-cell and endocrine research. NSJ Bioreagents supplies clone IRDN/1980R for research use only.

An INS Antibody can be used to investigate insulin expression and its relationship to pancreatic beta-cell biology, endocrine function, glucose regulation, metabolic research, and insulin-producing tumors.

For a highly published insulin monoclonal with an alternate INS05 clone designation, see our Insulin Antibody 2D11-H5 / INS05 Antibody page.

Application Notes

Optimal dilution of the INS Antibody IRDN/1980R / Recombinant Insulin Antibody should be determined by the researcher.

1. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Purified pig insulin conjugated to KLH was used as the immunogen for the recombinant INS Antibody IRDN/1980R.

Storage

Store the INS Antibody IRDN/1980R at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

insulin antibody, IRDN antibody, beta-cell marker antibody, insulinoma marker antibody, IDDM2 antibody, ILPR antibody, MODY10 antibody, proinsulin antibody

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