

Insulin Ab-5 (Clone INS05; same as 2D11-H5)

Mouse Monoclonal Antibody

Cat. #MS-1378-P0, -P1, or -P (0.1ml, 0.5ml, or 1.0ml at 200µg/ml) (Purified Ab with BSA and Azide)

Cat. #MS-1378-P1ABX or -PABX (0.1ml or 0.2ml at 1.0mg/ml) (Purified Ab without BSA and Azide)

Cat. #MS-1378-PCS (5 Slides) (Positive Control for Histology)

Description: Insulin is a 51-amino acid polypeptide composed of A and B chains connected through the C-peptide. Proinsulin, which has very little biological activity, is cleaved by proteases within its cell of origin into the insulin molecule and the C-terminal basic residue. 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. The main storage site for insulin is the pancreatic islets. Antibodies to insulin are important as β -cell and tumor (insulinoma) marker.

Comments: Ab-4 and Ab-5 are excellent for identifying the β -cells of islets of Langerhans in routine formalin-fixed, paraffin-embedded pancreatic tissues.

Mol. Wt. of Antigen: 6kDa

Epitope: Not determined

Species Reactivity: Human, Pig and Rat. Others not known

Clone Designation: INS05 (same as 2D11-H5)

Ig Isotype / Light Chain: IgG₁ / κ

Immunogen: Purified Insulin protein.

Applications and Suggested Dilutions:

- Immunohistology (Formalin/paraffin)
(Use Ab at 0.5-1.0µg/ml for 30 min at RT)
- * (No special pretreatment is required for immunohistochemical staining of formalin/paraffin tissues.)

The optimal dilution for a specific application should be determined by the investigator.

Positive Control: Pancreas

Cellular Localization: Cytoplasmic

Storage and Stability: Ab with sodium azide is stable for 24 months when stored at 2-8°C. Antibody WITHOUT sodium azide is stable for 36 months when stored at below 0°C.

Supplied As:

200µg/ml of antibody purified from ascites fluid by Protein G chromatography. Prepared in 10mM PBS, pH 7.4, with 0.2% BSA and 0.09% sodium azide. Also available without BSA and azide at 1mg/ml.

Limitations and Warranty:

Our products are intended FOR RESEARCH USE ONLY and are not approved for clinical diagnosis, drug use or therapeutic procedures. No products are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our data sheets and website. Our warranty is limited to the actual price paid for the product. NeoMarkers is not liable for any property damage, personal injury, time or effort or economic loss caused by our products.

Material Safety Data:

This product is not licensed or approved for administration to humans or to animals other than the experimental animals. Standard Laboratory Practices should be followed when handling this material. The chemical, physical, and toxicological properties of this material have not been thoroughly investigated. Appropriate measures should be taken to avoid skin and eye contact, inhalation, and ingestion. The material contains 0.09% sodium azide as a preservative. Although the quantity of azide is very small, appropriate care should be taken when handling this material as indicated above. The National Institute of Occupational Safety and Health has issued a bulletin citing the potential explosion hazard due to the reaction of sodium azide with copper, lead, brass, or solder in the plumbing systems. Sodium azide forms hydrazoic acid in acidic conditions and should be discarded in a large volume of running water to avoid deposits forming in metal drainage pipes.

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