

Product datasheet for **BM4073**

Insulin (INS) Mouse Monoclonal Antibody [Clone ID: IN-05]

Product data:

Product Type:	Primary Antibodies
Clone Name:	IN-05
Applications:	ELISA, IHC
Recommended Dilution:	Immunohistochemistry on Frozen Sections: 0.2 µg/ml (1/1000) Immunohistochemistry on Paraffin Sections: 0.2 µg/ml (1/1000). Pretreatment not necessary. Suggested Positive Control: Human pancreas. Has been described to work in RIA and Receptor Studies .
Reactivity:	Bovine, Human, Porcine
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Specificity:	The antibody IN-05 is specific for Human insulin. It recognizes also porcine and bovine insulin. No cross-reactions were found with other serum proteins. The antibody can be used for the quantification of human insulin by RIA, and also for receptor-insulin interactions. In normal tissues, IN-05 reacts with normal pancreatic islet beta cells. In tumor tissues it stains insulin secreting neoplasms (insulinomas).
Formulation:	PBS, pH 7.2 with 5 mg/ml BSA as stabilizer and 0.9% Sodium Azide as a preservative. State: Purified State: Lyophilized purified Ig fraction.
Reconstitution Method:	Restore with 0.5 ml distilled water.
Concentration:	0.2 mg/ml
Purification:	Affinity Chromatography.
Conjugation:	Unconjugated
Storage:	Store the antibody at 2-8°C for one month or (in aliquots) at -20°C for longer. Do not freeze working dilutions Avoid repeated freezing and thawing.



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Stability: Shelf life: One year from despatch.

Gene Name: insulin

Database Link: [Entrez Gene 3630 Human P01308](#)

Background: Insulin is one of the major regulatory hormones of intermediate metabolism throughout the body. The biological actions of this hormone involve integration of carbohydrate, protein, and lipid metabolism. 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. Immunocytochemical investigations have localized insulin in the B cells of pancreatic islets of Langerhans. Deficiency of insulin results in diabetes mellitus, one of the leading causes of morbidity and mortality in the general population. Insulin is also present in tumors of B cell origin such as insulinoma.

Synonyms: INS

Note: Protocol: **Protocol with frozen, ice-cold acetone-fixed sections:**
The whole procedure is performed at room temperature

1. Wash in PBS
2. Block endogenous peroxidase
3. Wash in PBS
4. Block with 10% normal goat serum in PBS for 30min. in a humid chamber
5. Incubate with primary antibody (dilution see datasheet) for 1h in a humid chamber
6. Wash in PBS
7. Incubate with secondary antibody (peroxidase-conjugated goat anti mouse IgG+IgM (H+L) minimal-cross reaction to human) for 1h in a humid chamber
8. Wash in PBS
9. Incubate with AEC substrate (3-amino-9-ethylcarbazol) for 12min.
10. Wash in PBS
11. Counterstain with Mayer's hemalum.

Protocol with formalin-fixed, paraffin-embedded sections:

The whole procedure is performed at room temperature

1. Deparaffinize and rehydrate tissue section
2. Block endogenous peroxidase
3. Wash in PBS
4. Block with 10% normal goat serum in PBS for 30min. in a humid chamber
5. Incubate with primary antibody (dilution see datasheet) for 1h in a humid chamber
6. Wash in PBS
7. Incubate with secondary antibody (peroxidase-conjugated goat anti mouse IgG+IgM (H+L) minimal-cross reaction to human) for 1h in a humid chamber
8. Wash in PBS
9. Incubate with AEC substrate (3-amino-9-ethylcarbazol) for 12min.
10. Wash in PBS
11. Counterstain with Mayer's hemalum.