

Insulin. Mouse Monoclonal Antibody E2E3 , Human, Bovine, Porcine

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.

ORDERING INFORMATION

CATALOG NUMBER
X1843M

SIZE
100 μ g

FORM
Unconjugated

HOST/CLONE
Mouse Clone E2E3

FORMULATION
Provided as solution in phosphate buffered saline with 0.08% sodium azide

CONCENTRATION
1 mg/ml

ISOTYPE
IgG1

APPLICATIONS
ELISA, Immunohistochemistry,
Western Blot

IMMUNOGEN

Hybridoma produced by the fusion of splenocytes from mice immunized with full-length insulin protein and mouse myeloma cells.

SPECIES REACTIVITY

Human, Bovine, Porcine

COMMENTS

Antibody can be used for Western blotting (1–5 μ g/ml), immunohistochemistry on formalin-fixed, paraffin-embedded tissues (1–2 μ g/ml, incubate at room temp. for at least 1 hr.) and ELISA. Optimal concentration should be evaluated by serial dilutions.

STORAGE

Product should be stored at -20°C. Aliquot to avoid freeze/thaw cycles

STABILITY

Products are stable for one year from purchase when stored properly

For research use only. Not for use in human diagnostics or therapeutics.

POSITIVE CONTROL/TISSUE EXPRESSION

SHIP CONDITIONS

Ship at ambient temperature, freeze upon arrival

REFERENCES

1. Roth, J., et al. "Distribution patterns of proinsulin and insulin in human insulinomas: an immunohistochemical analysis in 76 tumors." *Virchows Arch B Cell Pathol Incl Mol Pathol* 63, 51–61 (1992).
2. Nykiforuk, C.L., et al. "Transgenic expression and recovery of biologically active recombinant human insulin from *Arabidopsis thaliana* seeds." *Plant Biotechnology J.* 4, 77–85 (2006)
3. Lee, A.H., et al. "XBP-1 is required for biogenesis of cellular secretory machinery of exocrine glands." *EMBO J.*, 24, 4368–4380 (2005)

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