Human/Mouse/Bovine Insulin Antibody

Monoclonal Rat IgG_{2A} Clone # 182410

Catalog Number: MAB1417

DESCRIPTION

Species Reactivity	Human/Mouse/Bovine
Specificity	Detects bovine, human, and mouse insulin.
Source	Monoclonal Rat IgG_{2A} Clone # 182410
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	*E. coli*-derived recombinant human Insulin
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.

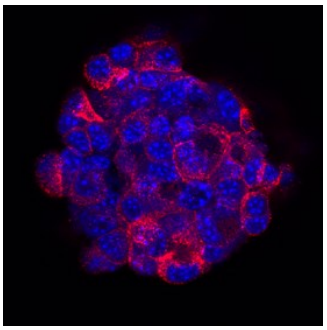
APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Immunocytochemistry	8-25 µg/mL	See Below
Immunohistochemistry	0.5-25 µg/mL	Immersion fixed paraffin-embedded sections of human pancreas
Intracellular Staining by Flow Cytometry	2.5 µg/10^6 cells	βTC-6 mouse beta cell insulinoma cell line fixed with paraformaldehyde and permeabilized with saponin
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

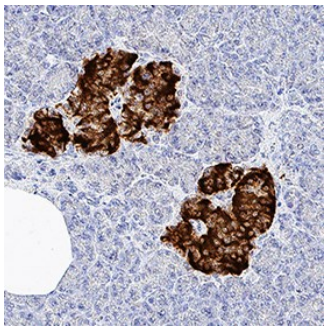
DATA

Immunocytochemistry



Insulin in βTC-6 Mouse Cell Line. Insulin was detected in immersion fixed ßTC-6 mouse beta cell insulinoma cell line using Human/Mouse/Bovine Insulin Monoclonal Antibody (Catalog # MAB1417) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Rat IgG Secondary Antibody (red; Catalog # Catalog # NL013) and counterstained with DAPI (blue). View our protocol for Fluorescent ICC Staining of Cells on Coverslips.

Immunohistochemistry



Insulin in Human Pancreas. Insulin was detected in immersion fixed paraffin-embedded sections of human pancreas using Rat Anti-Human/Mouse/Bovine Insulin Monoclonal Antibody (Catalog # MAB1417) at 0.5 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Rat IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC005). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to cytoplasm and plasma membrane in islet cells. Staining was performed using our protocol for IHC Staining with VisUCyte HRP Polymer Detection Reagents.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Insulin is a disulfide-linked heterodimeric protein secreted by the pancreatic Islets of Langerhans. Mature insulin is generated by the proteolytic removal of a peptide from proinsulin. It is involved in the regulation of glucose metabolism through interactions with the Insulin Receptor.

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