

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Reg1A in ELISAs. 100% cross-reactivity with recombinant human (rh) Reg1B in Western blot is observed. In direct ELISAs no cross-reactivity with rhReg3A, recombinant mouse Reg1, or recombinant rat Reg1A is observed.
Source	Monoclonal Rat IgG _{2A} Clone # 431211
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Reg1A Gln23-Asn166 Accession # P05451
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.

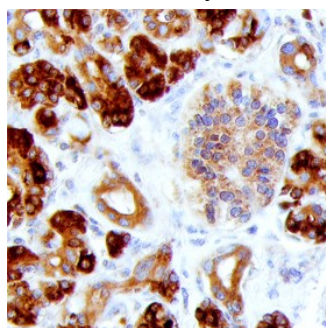
APPLICATIONS

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
Western Blot	1 µg/mL	Recombinant Human Reg1A
Immunohistochemistry	8-25 µg/mL	See Below

DATA

Immunohistochemistry



Reg1A in Human Pancreas.

Reg1A was detected in immersion fixed paraffin-embedded sections of human pancreas using Rat Anti-Human Reg1A Monoclonal Antibody (Catalog # MAB49371) at 15 µg/mL overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # Catalog # CTS013). Tissue was stained using the Anti-Rat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # Catalog # CTS017) and counterstained with hematoxylin (blue). Specific staining was localized to exocrine cells. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
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. <ul style="list-style-type: none"> 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

Reg1A, also known as PTP, PSP, and lithostathine, is a member of the Reg family of secreted proteins with a C-type lectin domain. Due to variable glycosylation, pancreatic Reg1A exists as multiple species of 16-18 kDa. Reg1A promotes the maintenance and growth of pancreatic islet β-cells and intestinal villi. It is up-regulated in pancreatitis and some carcinomas. Reg1A is an antigenic target in autoimmune diabetes. Human Reg1A shares 65%-68% aa sequence identity with mouse and rat Reg1A.

Reg1B, also known as secretory pancreatic stone protein 2 and lithostathine 1 beta, is a type I subclass member of the Reg family, which comprises secreted proteins with a C-type lectin domain. Reg1B is highly related to Reg1A, a protein that is implicated in islet cell regeneration and diabetogenesis.