

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Insulin C-peptide in direct ELISAs.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 790904
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Human Insulin C-Peptide synthetic peptide EAEDLQVGQVELGGGPGAGSLQPLALEGSLQ Accession # P01308
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

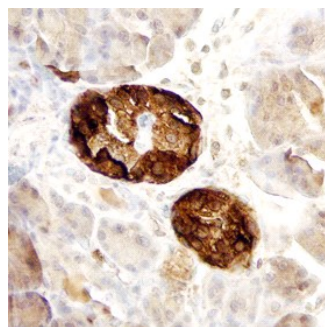
## APPLICATIONS

**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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Immunohistochemistry</b>	8-25 µg/mL	See Below

## DATA

### Immunohistochemistry



**Insulin in Human Pancreas.** Insulin was detected in immersion fixed paraffin-embedded sections of human pancreas using Mouse Anti-Human Insulin Monoclonal Antibody (Catalog # MAB14171) 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 # CTS013). Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific staining was localized to the cytoplasm of islet cells. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.5 mg/mL.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

Insulin is a peptide hormone that facilitates the cellular uptake of glucose by regulating the appearance of membrane glucose transporters. The single chain insulin propeptide consists of a 30 amino acid B chain (aa 25-54), a C-peptide (aa 55-89), and a 21 aa A chain (aa 90-110). Removal of the C-peptide by proteolysis enables the formation of mature Insulin, a disulfide-linked heterodimer of the A and B chains. Circulating C-peptide levels are elevated in hyperinsulinism, obesity, and type II diabetes. The human Insulin C-peptide shares 61% and 68% aa sequence identity with mouse and rat Insulin C-peptide, respectively.