**DESCRIPTION**

**Species Reactivity**  Human/Mouse/Bovine

**Specificity**  Detects bovine, human, and mouse insulin.

**Source**  Monoclonal Rat IgG2A 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.

<table>
<thead>
<tr>
<th>Recommended Concentration</th>
<th>Sample</th>
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<tr>
<td>8-25 μg/mL</td>
<td>See Below</td>
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**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 βTC-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 # NL013) and counterstained with DAPI (blue). View our protocol for Fluorescent ICC Staining of Cells on Coverslips.

**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.