

## DESCRIPTION

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

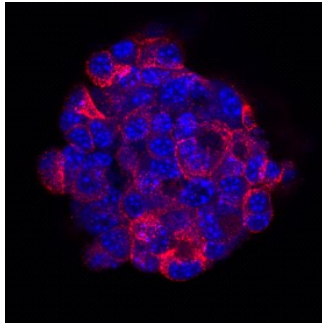
## APPLICATIONS

**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  |
|---|--|---|
| <b>Immunocytochemistry</b>                      | 8-25 µg/mL   | See Below   |
| <b>Intracellular Staining by Flow Cytometry</b> | 2.5 µg/10 <sup>6</sup> cells   | βTC-6 mouse beta cell insulinoma cell line fixed with paraformaldehyde and permeabilized with saponin |
| <b>CyTOF-ready</b>                              | 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

|                                |  |
|--------------------------------|--|
| <b>Reconstitution</b>          | Reconstitute at 0.5 mg/mL in sterile PBS.  |
| <b>Shipping</b>                | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.<br>*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 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.