

#### DESCRIPTION

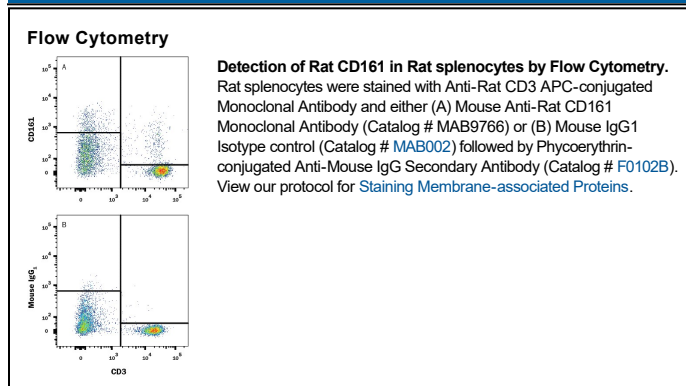
|                           |   |
|---------------------------|---|
| <b>Species Reactivity</b> | Rat   |
| <b>Specificity</b>        | Detects rat CD161 in ELISAs.  |
| <b>Source</b>             | Monoclonal Mouse IgG <sub>1</sub> Clone # 10/78   |
| <b>Purification</b>       | Protein A or G purified from hybridoma culture supernatant  |
| <b>Immunogen</b>          | Purified splenic NK cells from the LEW rat strain   |
| <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>Flow Cytometry</b> | 0.25 µg/10 <sup>6</sup> cells  | See Below |
| <b>CytoF-rady</b>     | Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation. |           |

#### DATA



#### 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

CD161, also known as KLRB1, NK1.1, and NKR-P1A is a 40 kDa type II transmembrane glycoprotein that contains one C-type lectin domain in its extracellular region. CD161 is expressed as a disulfide-linked dimer on the surface of Th17 cells and NK cells as well as on subsets of CD1-restricted T cells, intestinal NT cells, peripheral memory T cells, monocytes, and dendritic cells. It binds to OCIL/CLEC2d, leading to an inhibition of NK cell-mediated cytotoxicity and IFN-gamma secretion. Alternatively, CD161 can enhance TCR activation to CD1d ligation. CD161+ cell populations are depleted in ulcerative colitis, Grave's disease, and AIDS, although CD161+ T cells are activated during asthmatic attacks. Additional related proteins are expressed in mouse but not human: the inhibitory NKR-P1B and D, and the stimulatory NKR-P1A, C, and F.