

**DESCRIPTION**

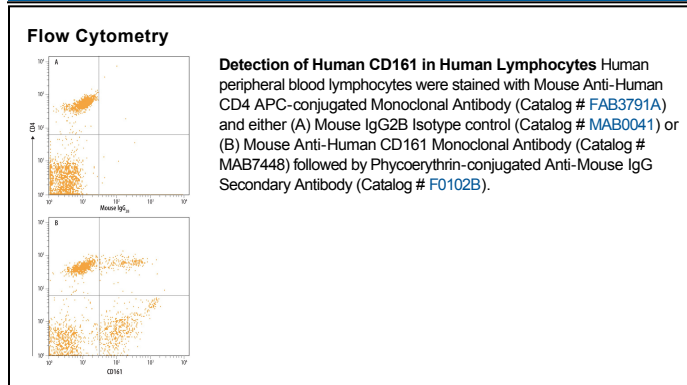
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human CD161 in direct ELISAs.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 702228
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	BaF3 mouse pro-B cell line transfected with human CD161 Accession # Q12918
<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>Flow Cytometry</b>	2.5 µg/10 <sup>6</sup> cells	See Below
<b>CyTOF-ready</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>	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**

CD161, also known as NKR-P1A and KLRB1, 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-g secretion. Alternatively, CD161 can enhance TCR activation to CD1d ligation. CD161<sup>+</sup> cell populations are depleted in ulcerative colitis, Grave's disease, and AIDS, although CD161<sup>+</sup> 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. Human CD161 shares 47% aa sequence identity with mouse and rat NKR-P1A.