

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human CD161 in direct ELISAs.
Source	Monoclonal Mouse IgG _{2B} Clone # 702228
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	BaF3 mouse pro-B cell line transfected with human CD161 Accession # Q12918
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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
Flow Cytometry	0.25-1 µg/10 ⁶ cells	Human peripheral blood lymphocytes

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. <ul style="list-style-type: none"> ● 12 months from date of receipt, 2 to 8 °C as supplied.

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-γ 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. Human CD161 shares 47% aa sequence identity with mouse and rat NKR-P1A.

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