

## ARG22931 anti-CD161 antibody [10/78] (PE)

Package: 50 tests  
Store at: 4°C

### Summary

Product Description	PE-conjugated Mouse Monoclonal antibody [10/78] recognizes CD161 Mouse anti Rat CD161 antibody, clone 10/78 recognizes the rat Killer cell lectin-like receptor subfamily B protein, also known as NKR-PI or CD161. CD161 is a 233 amino acid ~60 kDa type II single pass protein containing a single C-type lectin domain. CD161 is expressed on rat NK cells and T cell subpopulations. CD161 exists in 2 forms NKR-PIa and NKR-PIb, clone 10/78 Å recognizes both forms of CD161 (Li et al. 2003). Clone 10/78 competes with another anti CD161 clone, 3.2.3 for binding to antigen. Mouse anti Rat CD161 antibody, clone 10/78 has been successfully employed for the in vivo depletion of rat NK cells in an experimental obesity model (Wrann et al. 2010).
Tested Reactivity	Rat
Tested Application	FACS
Host	Mouse
Clonality	Monoclonal
Clone	10/78
Isotype	IgG1
Target Name	CD161
Species	Rat
Immunogen	Purified splenic NK cells from the LEW Rat strain.
Conjugation	PE
Alternate Names	CLEC5B; CD antigen CD161; CD161; NKR-P1; NKR-P1A; Killer cell lectin-like receptor subfamily B member 1; NKRP1A; NKR; HNKR-P1a; Natural killer cell surface protein P1A; C-type lectin domain family 5 member B; hNKR-P1A

### Application Instructions

Application table	<table> <tr> <th>Application</th><th>Dilution</th></tr> <tr> <td>FACS</td><td>Neat - 1:10</td></tr> </table>	Application	Dilution	FACS	Neat - 1:10
Application	Dilution				
FACS	Neat - 1:10				
Application Note	<p>FACS: Use 10 µl of the suggested working dilution to label 10<sup>6</sup> cells in 100 µl.</p> <p>* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.</p>				

### Properties

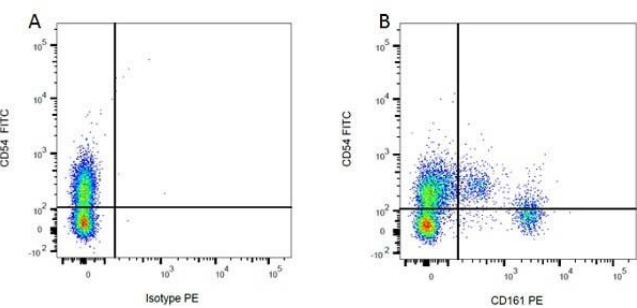
Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS, 0.09% Sodium azide, 1% BSA and 5% Sucrose
Preservative	0.09% Sodium azide
Stabilizer	1% BSA and 5% Sucrose

Storage instruction	Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	Klrb1a
Gene Full Name	killer cell lectin-like receptor subfamily B, member 1A
Background	Natural killer (NK) cells are lymphocytes that mediate cytotoxicity and secrete cytokines after immune stimulation. Several genes of the C-type lectin superfamily, including the rodent NKRP1 family of glycoproteins, are expressed by NK cells and may be involved in the regulation of NK cell function. The KLRB1 protein contains an extracellular domain with several motifs characteristic of C-type lectins, a transmembrane domain, and a cytoplasmic domain. The KLRB1 protein is classified as a type II membrane protein because it has an external C terminus. [provided by RefSeq, Jul 2008]
Function	Plays an inhibitory role on natural killer (NK) cells cytotoxicity. Activation results in specific acid sphingomyelinase/SMPD1 stimulation with subsequent marked elevation of intracellular ceramide. Activation also leads to AKT1/PKB and RPS6KA1/RSK1 kinases stimulation as well as markedly enhanced T-cell proliferation induced by anti-CD3. Acts as a lectin that binds to the terminal carbohydrate Gal-alpha(1,3)Gal epitope as well as to the N-acetyllactosamine epitope. Binds also to CLEC2D/LLT1 as a ligand and inhibits NK cell-mediated cytotoxicity as well as interferon-gamma secretion in target cells. [UniProt]
Calculated Mw	25 kDa
PTM	N-glycosylated. Contains sialic acid residues.

Images



ARG22931 anti-CD161 antibody [10/78] (PE) FACS image

Flow Cytometry: Figure A. FITC conjugated mouse anti rat CD54 and PE-conjugated mouse IgG1 isotype control. Figure B. FITC conjugated mouse anti rat CD54 and ARG22931 anti-CD161 antibody [10/78] (PE). All experiments performed on red cell lysed rat blood gated on mononuclear cells.