

## ARG22964 anti-CD161 antibody [B199.2] (PE)

Package: 50 tests

Store at: 4°C

### Summary

|                     |  |
|---------------------|--|
| Product Description | PE-conjugated Mouse Monoclonal antibody [B199.2] recognizes CD161<br>Mouse anti Human CD161 antibody, clone B199.2 recognizes the human Killer cell lectin-like receptor subfamily B member 1, also known as CD161, C-type lectin domain family 5 member B, HNKRP-1a, NKR-P1A or Natural killer cell surface protein P1A. CD161 is a 225 amino acid ~25 kDa predicted molecular mass, single pass type II transmembrane glycoprotein with a single C-type lectin domain. CD161 is expressed by almost all NK cells and a subset of CD3+ve T cells (Lanier et al. 1994). CD161, a member of the C-lectin is expressed as a disulphide bond-linked homodimeric cell surface protein, comprising two chains of ~40-44 kDa (Lanier et al. 1994). CD161 acts as a receptor for another c-type lectin, LLT1 with roles in the regulation of NK cell and T cell function (Aldemir et al. 2005). Mouse anti Human CD161 antibody, clone B199.2 cross-competes with and recognizes a similar epitope to the DX1 monoclonal antibody (Lanier et al. 1994). |
| Tested Reactivity   | Hu   |
| Tested Application  | FACS   |
| Host                | Mouse  |
| Clonality           | Monoclonal   |
| Clone               | B199.2   |
| Isotype             | IgG1   |
| Target Name         | CD161  |
| Species             | Human  |
| Immunogen           | Purified Human NK cells cultured in IL-2 (Bennett et al. 1996)   |
| Conjugation         | PE   |
| Alternate Names     | CLEC5B; CD antigen CD161; CD161; NKR-P1; NKR-P1A; Killer cell lectin-like receptor subfamily B member 1; NKR-P1A; NKR; HNKRP-1a; Natural killer cell surface protein P1A; C-type lectin domain family 5 member B; hNKRP-1A   |

### Application Instructions

| Application table | <table> <tr> <th>Application</th><th>Dilution</th></tr> <tr> <td>FACS</td><td>1:50 - 1:100</td></tr> </table>   | Application | Dilution | FACS | 1:50 - 1:100 |
|-------------------|---|-------------|----------|------|--------------|
| Application       | Dilution  |             |          |      |              |
| FACS              | 1:50 - 1:100  |             |          |      |              |
| Application Note  | FACS: Use 10 µl of the suggested working dilution to label 10 <sup>6</sup> cells in 100 µl.<br>* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist. |             |          |      |              |

### 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    | KLRB1  |
| Gene Full Name | killer cell lectin-like receptor subfamily B, member 1   |
| 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.   |