

## FITC anti-human CD45RA Antibody

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| <b>Catalog# / Size</b>   | 318553 / 25 tests<br>318554 / 100 tests                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Clone</b>             | S23030B                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Regulatory Status</b> | RUO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Other Names</b>       | GP180, L-CA, LCA, LY5, T200, PTPRC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Isotype</b>           | Mouse IgG1, $\kappa$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Description</b>       | CD45RA is a 205-220 kD single chain type I glycoprotein. It is an exon 4 splice variant of the tyrosine phosphatase CD45. The CD45RA isoform is expressed on resting/naïve T cells, medullary thymocytes, B cells and monocytes. CD45RA enhances both T cell receptor and B cell receptor signaling. CD45 non-covalently associates with lymphocyte phosphatase-associated phosphoprotein (LPAP) on T and B lymphocytes. CD45 has been reported to be associated with several other cell surface antigens including CD1, CD2, CD3, and CD4. CD45 has also been reported to bind galectin-1. CD45 isoform expression can change in response to cytokines. |

### Product Details

|                               |                                                                                                                                                                                                                                                                                                                                                                                                           |
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| <b>Verified Reactivity</b>    | Human                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Antibody Type</b>          | Monoclonal                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Host Species</b>           | Mouse                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Immunogen</b>              | Human CD45RA transfected cells                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Formulation</b>            | Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)                                                                                                                                                                                                                                                                                                                   |
| <b>Preparation</b>            | The antibody was purified by affinity chromatography and conjugated with FITC under optimal conditions.                                                                                                                                                                                                                                                                                                   |
| <b>Concentration</b>          | Lot-specific (to obtain lot-specific concentration and expiration, please enter the lot number in our <a href="#">Certificate of Analysis</a> online tool.)                                                                                                                                                                                                                                               |
| <b>Storage &amp; Handling</b> | The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>                                                                                                                                                                                                                                                               |
| <b>Application</b>            | <a href="#">FC - Quality tested</a>                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Recommended Usage</b>      | Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> . For flow cytometric staining, the suggested use of this reagent is 5 $\mu$ L per million cells in 100 $\mu$ L staining volume or 5 $\mu$ L per 100 $\mu$ L of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. |
| <b>Excitation Laser</b>       | Blue Laser (488 nm)                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Application Notes</b>      | Clone S23030B does not affect the binding of clone HI100 on target cells.                                                                                                                                                                                                                                                                                                                                 |
| <b>RRID</b>                   | AB_3720536 (BioLegend Cat. No. 318553)<br>AB_3720536 (BioLegend Cat. No. 318554)                                                                                                                                                                                                                                                                                                                          |

### Antigen Details

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| <b>Structure</b> | Tyrosine phosphatases, type I transmembrane (exon 4 splicing of CD45 gene), 205-220 kD |
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| <b>Distribution</b>       | B cells, naïve T cells, monocytes                                                                                                                                                           |
| <b>Function</b>           | Involved in TCR and BCR signaling                                                                                                                                                           |
| <b>Interaction</b>        | CD2, CD3, CD4                                                                                                                                                                               |
| <b>Ligand/Receptor</b>    | Galectin-1                                                                                                                                                                                  |
| <b>Cell Type</b>          | B cells, Monocytes, T cells, Tregs                                                                                                                                                          |
| <b>Biology Area</b>       | Cell Biology, Immunology, Inhibitory Molecules, Neuroscience, Neuroscience Cell Markers                                                                                                     |
| <b>Molecular Family</b>   | CD Molecules                                                                                                                                                                                |
| <b>Antigen References</b> | <ol style="list-style-type: none"> <li>1. Thomas M. 1989. <i>Annu Rev Immunol.</i> 7:339-69.</li> <li>2. Trowbridge I, <i>et al.</i> 1994. <i>Annu. Rev. Immunol.</i> 12:85-116.</li> </ol> |
| <b>Gene ID</b>            | <a href="#">5788</a>                                                                                                                                                                        |

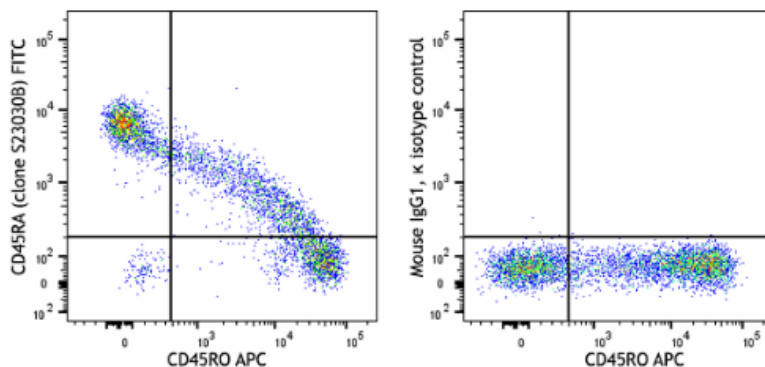
## Related Protocols

- [Cell Surface Flow Cytometry Staining Protocol](#)

## Other Formats

Purified anti-human CD45RA, FITC anti-human CD45RA, Pacific Blue™ anti-human CD45RA

## Product Data



Human peripheral blood lymphocytes were stained with anti-human CD45RO (clone UCHL1) APC and anti-human CD45RA (clone S23030B) FITC (left) or mouse IgG1, κ FITC isotype control (right).

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