

## 36-3067: Anti-CD45RA (Leukocyte Marker) Monoclonal Antibody(Clone: K4B5)

|                                |   |
|--------------------------------|---|
| <b>Clonality :</b>             | Monoclonal  |
| <b>Clone Name :</b>            | K4B5  |
| <b>Application :</b>           | FACS,IF,WB,IHC  |
| <b>Reactivity :</b>            | Human   |
| <b>Gene :</b>                  | PTPRC   |
| <b>Gene ID :</b>               | 5788  |
| <b>Uniprot ID :</b>            | P08575  |
| <b>Alternative Name :</b>      | B220, CD45R, GP180, Leukocyte common antigen (LCA), Loc, Ly-5, Lyt-4, Protein tyrosine phosphatase receptor type C (PTPRC), Receptor-type tyrosine-protein phosphatase C, T200 glycoprotein |
| <b>Isotype :</b>               | Mouse IgG2a, kappa  |
| <b>Immunogen Information :</b> | Stimulated human leukocytes   |

### Description

Recognizes a protein of 205kDa-220kDa, identified as CD45RA. CD45RA is isoforms of the human leukocyte common antigen (CD45). Human CD45 contains three exons which encode peptide segments designated A, B and C, respectively. The differential splicing of the exons generates at least five isoforms, ABC, AB, BC, B and O. This antibody reacts with ABC and BC isoforms. CD45RA is expressed on 40-50% of peripheral CD4+ T-cells, 50% of peripheral CD8+ T-cells, B-cells, and leukemic B-cell lines. T-cells expressing CD45RA are naive or virgin T-cells. T-cells expressing CD45RO are memory T-cells. CD45RA and CD45RO define complementary, predominantly non-overlapping populations of resting peripheral T-cells. This MAb is useful in study on the subpopulation of CD4+ or CD8+ T-cells. It can especially be used to differentiate T-cell lymphomas (CD45RO +ve) from B cell lymphomas (CD45RA +ve).

### Product Info

|                            |   |
|----------------------------|---|
| <b>Amount :</b>            | 20 µg / 100 µg  |
| <b>Content :</b>           | 200 µg/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml. |
| <b>Storage condition :</b> | Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous.                               |

### Application Note

Flow Cytometry (1-2ug/million cells); Immunofluorescence (1-2ug/ml); Western Blot (1-2ug/ml); Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes at RT)(Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes);

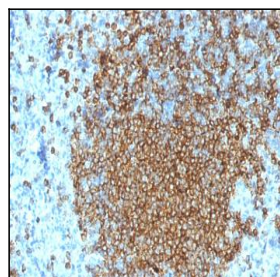


Fig. 1: Formalin-fixed, paraffin-embedded human Spleen stained with CD45RA Mouse Monoclonal Antibody (K4B5).

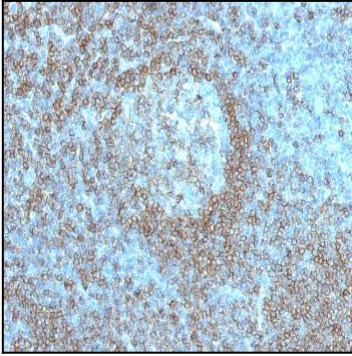


Fig. 2: Formalin-fixed, paraffin-embedded human Tonsil stained with CD45RA Mouse Monoclonal Antibody (K4B5).

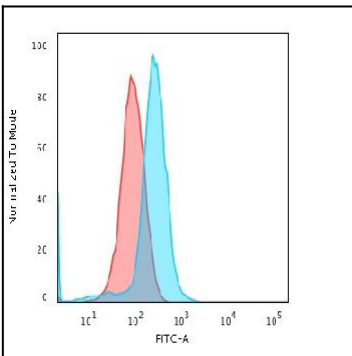


Fig. 3: Flow Cytometric Analysis of Jurkat cells using CD45RA Mouse Monoclonal Antibody (K4B5) followed by Goat anti-Mouse IgG-CF488 (Blue); Isotype Control (Red).

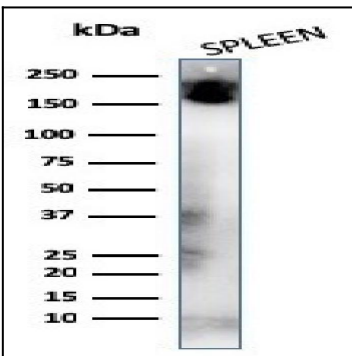


Fig. 4: Western Blot Analysis of human Spleen tissue lysates using CD45RA Mouse Monoclonal Antibody (K4B5)