

### CD45RA (Leucocyte Marker) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone PTPRC/1148 ] Catalog # AH12188

### **Specification**

## CD45RA (Leucocyte Marker) Antibody - With BSA and Azide - Product Information

Application ,2,3,4,
Primary Accession P08575
Other Accession 5788, 654514
Reactivity Human
Host Mouse
Clonality Monoclonal

Isotype Mouse / IgG1, kappa
Calculated MW 205-220kDa KDa

### CD45RA (Leucocyte Marker) Antibody - With BSA and Azide - Additional Information

#### **Gene ID 5788**

### **Other Names**

Receptor-type tyrosine-protein phosphatase C, 3.1.3.48, Leukocyte common antigen, L-CA, T200, CD45, PTPRC, CD45

#### Storage

Store at 2 to 8°C. Antibody is stable for 24 months.

#### **Precautions**

CD45RA (Leucocyte Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

## CD45RA (Leucocyte Marker) Antibody - With BSA and Azide - Protein Information

Name PTPRC (HGNC:9666)

## **Synonyms** CD45

## **Function**

Protein tyrosine-protein phosphatase required for T-cell activation through the antigen receptor (PubMed:<a href="http://www.uniprot.org/citations/35767951" target="\_blank">35767951</a>). Acts as a positive regulator of T-cell coactivation upon binding to DPP4. The first PTPase domain has enzymatic activity, while the second one seems to affect the substrate specificity of the first one. Upon T-cell activation, recruits and dephosphorylates SKAP1 and FYN. Dephosphorylates LYN, and thereby modulates LYN activity (By similarity).

### **Cellular Location**

Cell membrane; Single-pass type I membrane protein. Membrane raft. Synapse. Note=Colocalized with DPP4 in membrane rafts.



#### **Tissue Location**

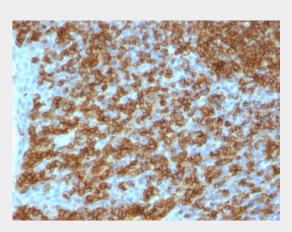
Isoform 1: Detected in thymocytes. Isoform 2: Detected in thymocytes. Isoform 3: Detected in thymocytes. Isoform 4: Not detected in thymocytes. Isoform 5: Detected in thymocytes. Isoform 6: Not detected in thymocytes. Isoform 7: Detected in thymocytes Isoform 8: Not detected in thymocytes.

## CD45RA (Leucocyte Marker) Antibody - With BSA and Azide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## CD45RA (Leucocyte Marker) Antibody - With BSA and Azide - Images



Formalin-fixed, paraffin-embedded human Tonsil stained with CD45RA Monoclonal Antibody (PTPRC/1148).

# CD45RA (Leucocyte Marker) Antibody - With BSA and Azide - Background

Recognizes a protein of 205kDa-220kDa, identified as CD45RA. It is an isoform 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).

## CD45RA (Leucocyte Marker) Antibody - With BSA and Azide - References

West, K.P., et al. 1986. The demonstration of B-cell, T-cell and myeloid antigens in paraffin sections. J. Pathol. 150: 89-101