

**CD45RB (B-Cell Marker) Antibody - With BSA and Azide**  
**Mouse Monoclonal Antibody [Clone SPM569 ]**  
**Catalog # AH10697**

**Specification**

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**CD45RB (B-Cell Marker) Antibody - With BSA and Azide - Product Information**

|                   |                                               |
|-------------------|-----------------------------------------------|
| Application       | ,14,3,4,                                      |
| Primary Accession | <a href="#">P08575</a>                        |
| Other Accession   | <a href="#">5788</a> , <a href="#">654514</a> |
| Reactivity        | Human                                         |
| Host              | Mouse                                         |
| Clonality         | Monoclonal                                    |
| Isotype           | Mouse / IgG1, kappa                           |
| Calculated MW     | 180-220kDa KDa                                |

**CD45RB (B-Cell 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

**Format**

200ug/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.

**Storage**

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

**Precautions**

CD45RB (B-Cell Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

**CD45RB (B-Cell 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: [35767951](http://www.uniprot.org/citations/35767951)). 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

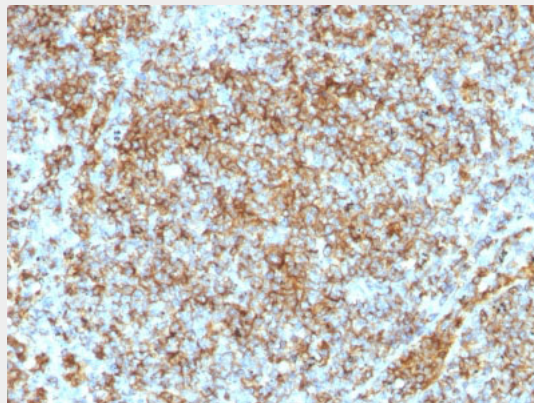
Isoform 1: Detected in thymocytes. Isoform 2: Detected in thymocytes. Isoform 3: Detected in thymocytes. Isoform 4: Not detected in thymocytes. Isoform 5: Detected in thymocytes. Isoform 6: Not detected in thymocytes. Isoform 7: Detected in thymocytes Isoform 8: Not detected in thymocytes.

### CD45RB (B-Cell 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](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### CD45RB (B-Cell Marker) Antibody - With BSA and Azide - Images



Formalin-fixed, paraffin-embedded human Lymphoma stained with CD45RB Monoclonal Antibody (SPM569).

### CD45RB (B-Cell Marker) Antibody - With BSA and Azide - Background

CD45R, also designated CD45 and PTPRC, has been identified as a transmembrane glycoprotein, broadly expressed among hematopoietic cells. Multiple isoforms of CD45R are distributed throughout the immune system according to cell type. These isoforms arise because of alternative splicing of exons 4, 5, and 6. The corresponding protein domains are characterized by the binding of monoclonal antibodies specific for CD45RA (exon 4), CD45RB (exon 5), CD45RC (exon 6) and CD45RO (exons 4 to 6 spliced out). The variation in these isoforms is localized to the extracellular domain of CD45R, while the intracellular domain is conserved. CD45R functions as a phosphor-tyrosine phosphatase. Antibody to CD45 is useful in differential diagnosis of lymphoid tumors from non-hematopoietic undifferentiated neoplasms.

### CD45RB (B-Cell Marker) Antibody - With BSA and Azide - References

Gatter KC et. al. Lancet, 1985 Jun 8, 1(8441):1302-5. | Michie SA et. al. American Journal of Clinical Pathology, 1987, 88(4):457-62