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Anti-CD45RB (B-Cell Marker) Antibody
Recombinant Rabbit Monoclonal Antibody
Catalog # AH13474

Specification

Anti-CD45RB (B-Cell Marker) Antibody - Product Information

Application	**WB, IHC-P, IF, FC**
Primary Accession	P08575
Other Accession	654514
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Monoclonal**
Isotype	**Rabbit / IgG, kappa**
Calculated MW	**147486**

Anti-CD45RB (B-Cell Marker) Antibody - Additional Information

Gene ID 5788

Other Names
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

Application Note
WB~~1:1000<br \>IHC-P~~N/A<br \>IF~~1:50~200<br \>FC~~1:10~50

Format
200ug/ml of Ab purified by Protein A. 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
Anti-CD45RB (B-Cell Marker) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-CD45RB (B-Cell Marker) Antibody - Protein Information

Name PTPRC (HGNC:9666)

Synonyms CD45

Function
Protein tyrosine-protein phosphatase required for T-cell activation through the antigen receptor

(PubMed: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). Interacts with CLEC10A at antigen presenting cell-T cell contact; CLEC10A on immature dendritic cells recognizes Tn antigen- carrying PTPRC/CD45 receptor on effector T cells and modulates T cell activation threshold to limit autoreactivity.

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

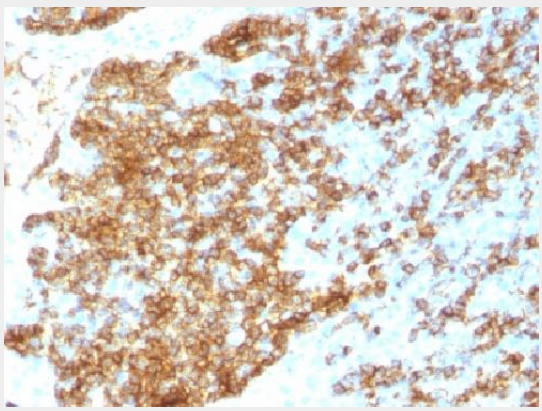
Tissue Location
Isoform 1: Detected in thymocytes. Isoform 2: Detected in thymocytes. Isoform 3: Detected in thymocytes. Isoform 4: Not detected in thymocytes. Isoform 5: Detected in thymocytes. Isoform 6: Not detected in thymocytes. Isoform 7: Detected in thymocytes Isoform 8: Not detected in thymocytes.

Anti-CD45RB (B-Cell Marker) Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-CD45RB (B-Cell Marker) Antibody - Images



Formalin-fixed paraffin-embedded human Tonsil stained with CD45RB Recombinant Rabbit Monoclonal Antibody (PTPRC/1783R).

Anti-CD45RB (B-Cell Marker) Antibody - 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. CD45RB is expressed on mature B-lymphocytes and the majority of lymphomas and leukemias of B-cell origin.