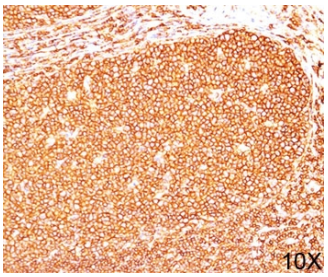
CD45RB Antibody PD7/26 / Lymphoid Cell Marker [clone PD7/26] (V2242)

Catalog No.	Formulation	Size
V2242-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V2242-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V2242SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug
V2242IHC-7ML	Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only*	7 ml

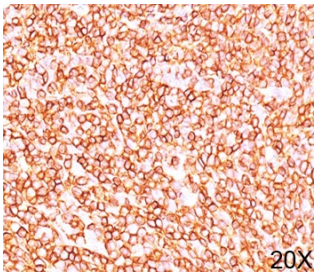
Citations (8)

Bulk quote request

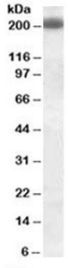
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	PD7/26
Purity	Protein G purified
Buffer	1X PBS, pH 7.4
Gene ID	5788
Localization	Cell surface and cytoplasmic
Applications	Flow cytometry: 0.5-1ug/10^6 cells Immunofluorescence: 0.5-1ug/ml Western blot: 1-2ug/ml Immunohistochemistry (FFPE): 0.25-0.5ug/ml for 30 min at RT
Limitations	This CD45RB Antibody PD7/26 / Lymphoid Cell Marker is available for research use only.



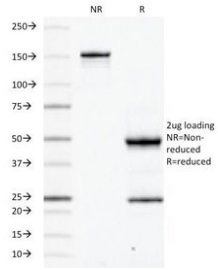
CD45RB Antibody PD7/26 Human Tonsil Lymphoid Follicle IHC. Immunohistochemistry of human tonsil tissue using CD45RB Antibody PD7/26 / Lymphoid Cell Marker shows strong HRP-DAB brown staining throughout the lymphoid follicle, with prominent membrane-associated staining of densely distributed lymphoid cells. The image was acquired at 10X magnification. This CD45RB Antibody highlights the broad distribution of the PTPRC isoform within human lymphoid tissue.



CD45RB Antibody PD7/26 Human Tonsil Lymphoid Cells IHC. Immunohistochemistry of human tonsil tissue using CD45RB Antibody PD7/26 / Lymphoid Cell Marker shows prominent HRP-DAB brown staining outlining individual lymphoid cells. The 20X magnification provides a higher-resolution view of the membrane-associated staining pattern of CD45RB within the lymphoid population. This CD45RB Antibody demonstrates cellular localization of the PTPRC isoform in human tonsil tissue.



CD45RB Antibody PD7/26 Human Daudi B Cell Lymphoma WB. Western blot analysis of human Daudi B cell lymphoma lysate using CD45RB Antibody PD7/26 / Lymphoid Cell Marker shows a prominent immunoreactive band near 200 kDa. CD45RB has a predicted unmodified molecular weight of approximately 147-180 kDa and may migrate at approximately 180-220 kDa due to extensive glycosylation. This CD45RB Antibody demonstrates detection of the PTPRC isoform in human B cells.



SDS-PAGE Analysis of Purified, BSA-Free CD45RB Antibody (clone PD7/26). Confirmation of Integrity and Purity of the Antibody.

Description

CD45RB Antibody PD7/26 / Lymphoid Cell Marker recognizes CD45RB, an alternatively spliced form of the leukocyte common antigen CD45 encoded by the PTPRC gene. CD45 is a transmembrane protein tyrosine phosphatase broadly expressed on nucleated cells of hematopoietic origin. Alternative splicing within its extracellular region generates several CD45 isoforms with differing expression patterns among leukocyte populations, making CD45RB an important target for studies of lymphoid cells, immune phenotype and hematopoietic cell differentiation.

PTPRC encodes a receptor-type protein tyrosine phosphatase with a large extracellular region, a single transmembrane domain and intracellular phosphatase domains. CD45 regulates Src family kinases and other components of antigen receptor signaling pathways, including signaling downstream of the T cell and B cell receptors. Through these activities, CD45 contributes to lymphocyte activation, differentiation, survival and immune responsiveness.

CD45RB represents CD45 forms containing the alternatively encoded B exon within the extracellular region. Its expression varies among leukocyte populations and can change during lymphocyte differentiation and activation. A CD45RB Antibody can therefore complement other CD45 isoform markers when investigating lymphocyte phenotype and changes in PTPRC expression. Interpretation of CD45RB staining typically considers the cell population and additional phenotypic markers rather than treating CD45RB as exclusive to a single lymphocyte subset.

CD45RB is studied in immunology, hematology and lymphoid tissue research. Analysis of this PTPRC isoform can contribute to the characterization of lymphocytes and other hematopoietic cell populations in normal and disease-associated tissues. CD45RB is also relevant to studies of immune activation and differentiation, providing an isoform-specific perspective that complements broader detection of the CD45 leukocyte common antigen.

Clone PD7/26 is a mouse monoclonal antibody directed against human CD45RB. PD7/26 also has a substantial history of use in published research as a component of antibody combinations, particularly together with the CD45 clone 2B11 (PD7/26 + 2B11). This publication history should be distinguished from studies evaluating PD7/26 independently. A CD45RB Antibody provides a useful reagent for investigating lymphoid cells, leukocyte differentiation and PTPRC isoform expression.

CD45RB is an alternatively spliced PTPRC isoform involved in lymphocyte differentiation and immune cell phenotyping; learn more about this target and related reagents on our CD45RB Antibody page.

Application Notes

Variations in protocols, secondaries and substrates may require the CD45RB Antibody PD7/26 / Lymphoid Cell Marker to be titered up or down for optimal performance.

1. Staining of formalin-fixed tissues requires boiling tissue sections in 10mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes.
2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

Immunogen

Human peripheral blood lymphocytes maintained in T cell growth factor were used as the immunogen for this CD45RB antibody.

Storage

Store the CD45RB antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).

Alternate Names

CD45RB antibody, PTPRC antibody, CD45 antibody, CD45R antibody, Leukocyte common antigen antibody, LCA antibody, Protein tyrosine phosphatase receptor type C antibody

References (2)

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