

Mouse anti-Human CD45 / LCA Monoclonal Antibody | anti-PTPRC antibody

CD45 / LCA (Leucocyte Marker) Mouse Monoclonal Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA62881	Mouse	Human	Immunohistochemistry, Immunofluorescence, Flow Cytometry, Functional Assay

PRODUCT SYNONYMS

CD45 / LCA; Monoclonal Antibody; CD45 / LCA (Leucocyte Marker) Mouse Monoclonal Antibody; 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; anti-PTPRC antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG1, kappa
Clone Number	SPM496
Specificity	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. This MAb reacts with all isoforms of CD45R expressed by all hematopoietic cells, except erythrocytes, having a higher level of expression on lymphocytes than on granulocytes (Workshop IV). Epitope of this MAb resides in the sialic acid moiety of T200 molecule. It enhances the proliferative response of B cells in an anti-immunoglobulin-induced B cell proliferation. Antibody to CD45 is useful in differential lymphoid tumors from non-hematopoietic undifferentiated neoplasms.
Form/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.
Sequence Length	1306
Applicable Applications for anti-PTPRC antibody	IHC (Immunohistochemistry), IF (Immunofluorescence), FCM/FACS (Flow Cytometry)
Cellular Localization	Cell Surface and Cytoplasmic
Immunogen	Stimulated human leukocytes
Hu-Chromosome Location	1q31.3
Positive Control	Ramos, U-698, or GA-10 cells. Tonsil
Preparation and Storage	Antibody without azide - store at -20 to -80 degree C. Non-hazardous. No MSDS required.

IMAGES



IHC (Immunohistochemistry)
Formalin-fixed, paraffin-embedded human Tonsil stained with CD45 Monoclonal Antibody (SPM496).

ADDITIONAL INFORMATION

References	Alsinet E, et. al. European Journal of Immunology, 1990, 20(12):2801-4. Knapp, W. et. al. Leucocyte Typing IV, p531-536, Oxford Univ. Press, 1989.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	392307007
NCBI GeneID	5788
NCBI Accession #	NP_002829.3
NCBI GenBank Nucleotide #	NM_002838.4
UniProt Accession #	P08575; Q16614; Q9H0Y6; A8K7W6
Molecular Weight	180-220kDa
NCBI Official Full Name	receptor-type tyrosine-protein phosphatase C isoform 1
NCBI Official Synonym Full Names	protein tyrosine phosphatase, receptor type C
NCBI Official Symbol	PTPRC
NCBI Official Synonym Symbols	LCA; LY5; B220; CD45; L-CA; T200; CD45R; GP180
NCBI Protein Information	receptor-type tyrosine-protein phosphatase C
UniProt Protein Name	Receptor-type tyrosine-protein phosphatase C
UniProt Gene Name	PTPRC
UniProt Synonym Gene Names	CD45; L-CA
UniProt Entry Name	PTPRC_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.