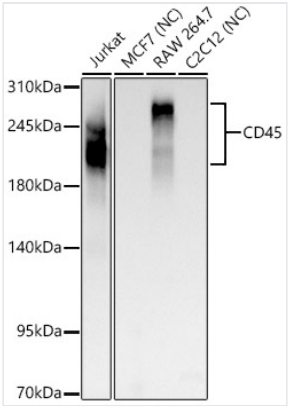
CD45 Antibody – Rabbit Monoclonal

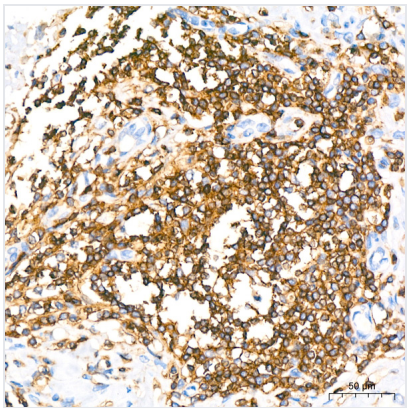
PRODUCT OVERVIEW

Product Name	CD45, Monoclonal Antibody
Full Product Name	CD45 Rabbit PolymAb
Product Gene Name	anti-CD45 antibody
Product Synonym Names	LCA; LY5; B220; CD45; L-CA; T200; CD45R; GP180; IMD105
Clonality	Monoclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human, Mouse
Form/Format	PBS with 0.05% proclin300, 0.05% BSA, 50% glycerol, pH7.3.
Purity/Purification	Affinity purification
Preparation and Storage	Store at -20 degree C. Avoid freeze/thaw cycles.
Molecular Weight	Calculated MW: 180-240kDa Observed MW: 180-250kDa
OMIM	126200
3D Structure	ModBase 3D Structure for P08575
Immunogen	Recombinant protein of human/mouse CD45.
Product Categories/Family for anti-CD45 antibody	Signal Transduction; Kinase; Tyrosine kinases; Cell Biology Developmental Biology; Apoptosis; Immunology Inflammation; CDs; B Cell Receptor Signaling Pathway; T Cell Receptor Signaling Pathway; Neuroscience; Cell Type Marker; Stem Cells; Hematopoietic Pro
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for anti-CD45 antibody	Western Blot (WB), Immunohistochemistry-Paraffin (IHC-P), Immunofluorescence (IF), Immunocytochemistry (ICC), ELISA (EIA)
Application Notes for anti-CD45 antibody	WB: 1:500-1:1000 IHC-P: 1:50-1:200 IF, 1:50-1:200 ELISA: Recommended starting concentration is 1ug/mL. Please optimize the concentration based on your specific assay requirements.
Related Product Information for anti-CD45 antibody	The protein encoded by this gene is a member of the protein tyrosine phosphatase (PTP) family. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitosis, and oncogenic transformation. This PTP contains an extracellular domain, a single transmembrane segment and two tandem intracytoplasmic catalytic domains, and thus is classified as a receptor type PTP. This PTP has been shown to be an essential regulator of T- and B-cell antigen receptor signaling. It functions through either direct interaction with components of the antigen receptor complexes, or by activating various Src family kinases required for the antigen receptor signaling. This PTP also suppresses JAK kinases, and thus functions as a regulator of cytokine receptor signaling. Alternatively spliced transcripts variants of this gene, which encode distinct isoforms, have been reported.
Other Notes	Small volumes of anti-CD45 antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.

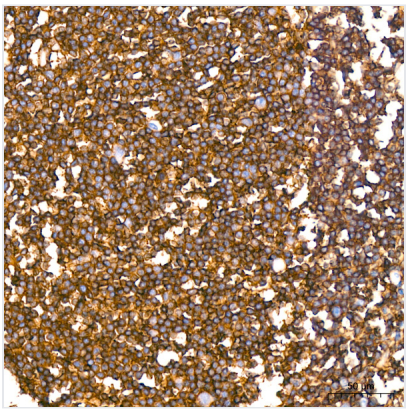
Searchable Terms for CD45 purchase	MBS9148065 is an antibody targeting CD45. Also known as CD45 Rabbit PolymAb. Reactive in Human, Mouse. Host: Rabbit.



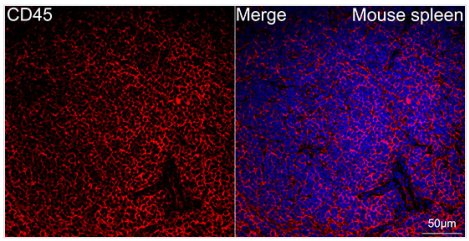
Western Blot (WB) of anti-CD45 antibody
Western blot analysis of various lysates, using CD45 Rabbit PolymAb® (MBS9148065) at 1:1000 dilution.Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.Lysates/proteins: 25ug per lane.Blocking buffer: 3% nonfat dry milk in TBST.Detection: ECL Basic Kit (RM00020).Negative control(NC):MCF-7,C2C12Exposure time: 15s.



Immunohistochemistry (IHC) of anti-CD45 antibody
Immunohistochemistry analysis of paraffin-embedded Human testis tissue using CD45 Rabbit PolymAb® (MBS9148065) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.



Immunohistochemistry (IHC) of anti-CD45 antibody
Immunohistochemistry analysis of paraffin-embedded Human tonsil tissue using CD45 Rabbit PolymAb® (MBS9148065) at dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Citrate Bufferr (pH 6.0) prior to IHC staining.



Immunocytochemistry (ICC) of anti-CD45 antibody
Confocal imaging of Mouse spleen using CD45 Rabbit PolymAb® (MBS9148065,dilution 1:200) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (blue). Objective: 40x.Perform high pressure antigen retrieval with 0.01 M citrate buffer (pH 6.0) prior to IF staining.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CD45. It may not necessarily be applicable to this product.

NCBI GI #	392307007
NCBI GeneID	5788/19264
NCBI Accession #	NP_002829.3
UniProt Primary Accession #	P08575
UniProt Secondary Accession #	P06800
UniProt Related Accession #	P08575
GenBank Nucleotide #	NM_002838.4
UniProt Protein Name	Receptor-type tyrosine-protein phosphatase C
UniProt Synonym Protein Names	Leukocyte common antigen; L-CA; T200
Protein Family	Protein tyrosine phosphatase receptor type C-associated protein

UniProt Gene Name	PTPRC
UniProt Synonym Gene Names	CD45; L-CA
UniProt Entry Name	PTPRC_HUMAN
UniProt Comments for CD45	CD45: a receptor type protein tyrosine phosphatase protein. Contains an extracellular domain, a single transmembrane segment and two tandem intracytoplasmic catalytic domains. The first PTPAse domain has enzymatic activity, while the second one seems to affect the substrate specificity of the first one. Specifically expressed in hematopoietic cells. An essential regulator of T- and B-cell antigen receptor signaling. Functions through either direct interaction with components of the antigen receptor complexes, or by activating various Src family kinases required for the antigen receptor signaling. Suppresses JAK kinases, and thus functions as a regulator of cytokine receptor signaling. Four alternatively spliced isoforms have been described. Protein type: Membrane protein, integral; Motility/polarity/chemotaxis; Receptor protein phosphatase, tyrosine; EC 3.1.3.48 Chromosomal Location of Human Ortholog: 1q31-q32 Cellular Component: focal adhesion; membrane; integral to plasma membrane; plasma membrane; lipid raft; external side of plasma membrane Molecular Function: protein binding; transmembrane receptor protein tyrosine phosphatase activity; protein tyrosine phosphatase activity; protein kinase binding Biological Process: B cell proliferation; axon guidance; substrate-bound cell migration, cell release from substrate; regulation of cell cycle; protein amino acid dephosphorylation; positive regulation of antigen receptor-mediated signaling pathway; T cell receptor signaling pathway; bone marrow development; B cell receptor signaling pathway; stem cell development; cell surface receptor linked signal transduction; dephosphorylation; release of sequestered calcium ion into cytosol; positive regulation of protein kinase activity; negative regulation of T cell mediated cytotoxicity; positive regulation of B cell proliferation; negative regulation of protein kinase activity; positive regulation of T cell proliferation; hemopoietic progenitor cell differentiation; negative regulation of cytokine and chemokine mediated signaling pathway; immunoglobulin biosynthetic process; defense response to virus; T cell differentiation Disease: Hepatitis C Virus, Susceptibility To; Severe Combined Immunodeficiency, Autosomal Recessive, T Cell-negative, B Cell-positive, Nk Cell-positive
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
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