

Mouse anti-Human CD45 Monoclonal Antibody | anti-CD45 antibody

Anti-Hu CD45 PE-Cyanine7

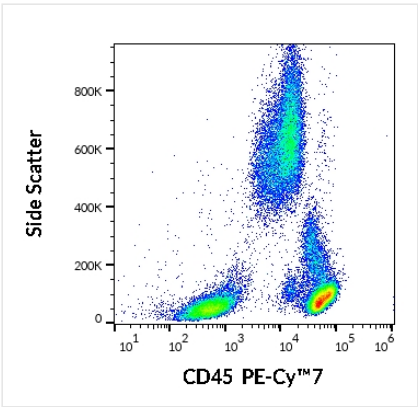
CATALOG # AAA128311	HOST Mouse	REACTIVITY Human	APPLICATIONS Flow Cytometry, Functional Assay
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PRODUCT SYNONYMS

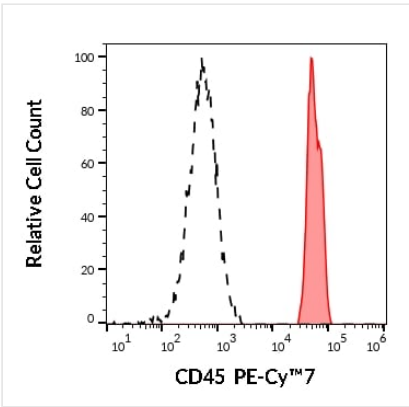
CD45; Monoclonal Antibody; Anti-Hu CD45 PE-Cyanine7; protein tyrosine phosphatase receptor type C; LCA; Receptor-type tyrosine-protein phosphatase C; Leukocyte common antigen; L-CA; T200; LY5; B220; GP180; anti-CD45 antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG1 kappa
Clone Number	2D1
Specificity	The mouse monoclonal antibody 2D1 reacts with an extracellular epitope of all alternative forms of human CD45 antigen (Leukocyte Common Antigen), a 180-220 kDa single chain type I transmembrane protein expressed at high level on all cells of hematopoietic origin, except from erythrocytes and platelets.
Purity/Purification	The purified antibody is conjugated with tandem dye PE-Cyanine7 under optimum conditions. The conjugate is purified by size-exclusion chromatography.
Form/Format	Stabilizing phosphate buffered saline (PBS) solution containing 15 mM sodium azide
Sequence Length	1306
Applicable Applications for anti-CD45 antibody	FCM/FACS (Flow Cytometry)
Immunogen	Human peripheral blood mononuclear cells
Conjugation	PE-Cyanine7
Preparation and Storage	Store in the dark at 2-8 degree C. Do not freeze. Avoid prolonged exposure to light.



FCM/FACS (Flow Cytometry)
Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CD45 (2D1) PE-Cy™7 antibody (4 ul reagent / 100 ul of peripheral whole blood).



FCM/FACS (Flow Cytometry)
Separation of human CD45 positive lymphocytes (red-filled) from human CD45 negative blood debris (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CD45 (2D1) PE-Cy™7 antibody (4 ul reagent / 100 ul of peripheral whole blood).

ADDITIONAL INFORMATION

Related Product Information for anti-CD45 antibody	CD45 (LCA, leukocyte common antigen) is a receptor-type protein tyrosine phosphatase ubiquitously expressed in all nucleated hematopoietic cells, comprising approximately 10% of all surface proteins in lymphocytes. CD45 glycoprotein is crucial in lymphocyte development and antigen signaling, serving as an important regulator of Src-family kinases. CD45 protein exists as multiple isoforms as a result of alternative splicing; these isoforms differ in their extracellular domains, whereas they share identical transmembrane and cytoplasmic domains. These isoforms differ in their ability to translocate into the glycosphingolipid-enriched membrane domains and their expression depends on cell type and physiological state of the cell. Besides the role in immunoreceptor signaling, CD45 is important in promoting cell survival by modulating integrin-mediated signal transduction pathway and is also involved in DNA fragmentation during apoptosis.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	392307007
NCBI GeneID	5788
NCBI Accession #	NP_002829.3
NCBI GenBank Nucleotide #	NP_002829.3
UniProt Accession #	P08575
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.

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Online datasheet: <https://www.aaabiotech.com/monoclonal/cd45-antibody-clone-2d1-flow-cytometry-elisa/128311>