

CD45 / LCA (Leucocyte Marker) Antibody

Mouse Monoclonal Antibody [Clone 135-4C5]

Catalog No	Format	Size
5788-MSM9-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
5788-MSM9-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
5788-MSM9-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

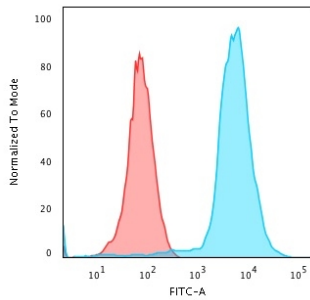
Applications	Tested Dillution	Note
Flow Cytometry (Flow)	1-2ug/million cells	
Immunofluorescence (IF)	1-3ug/ml	
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes

Product Details

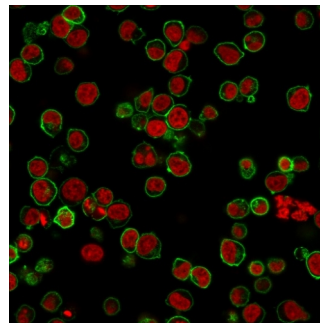
Clone	135-4C5
Gene Name	PTPRC
Immunogen	Stimulated human leukocytes
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG2b / Kappa
Mol. Weight of Antigen	180-220kDa
Cellular Localization	Cell membrane, Membrane raft
Species Reactivity	Human
Positive Control	Jurkat, PBMCs, Ramos, U-698 or GA-10 cells. Tonsil.

*Optimal dilution for a specific application should be determined.

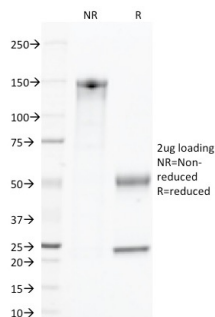
Product Images for CD45 / LCA (Leucocyte Marker) Antibody



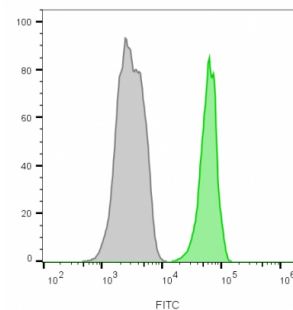
Flow Cytometric Analysis of PFA-fixed Jurkat cells using CD45 Monoclonal Antibody (135-4C5) followed by Goat anti- Mouse- IgG-CF488 (Blue); Isotype Control (Red).



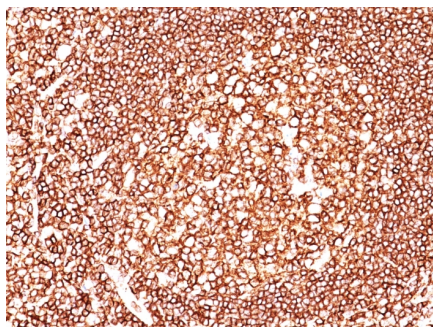
Immunofluorescence Analysis of PFA-fixed Jurkat cells labeling CD45RA with CD45 Monoclonal Antibody (135-4C5) followed by Goat anti-Mouse IgG-CF488 (Green). The nuclear counterstain is Redot.



SDS-PAGE Analysis of Purified CD45 MAb (135-4C5). Confirmation of Integrity and Purity of Antibody



Flow cytometry analysis of lymphocyte gated PBMCs unstained (gray) or stained with CF488A-labeled CD45 monoclonal antibody (135-4C5) (green).



Formalin-fixed, paraffin-embedded human tonsil stained with CD45 Monoclonal Antibody (135-4C5).

Specificity & Comments

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). Antibody to CD45 is useful in differential diagnosis of lymphoid tumors from non-hematopoietic undifferentiated neoplasms.

Limitations and Warranty

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

Supplied As

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.

Storage and Stability

Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

Research Areas

Autophagy, B Cell Markers, Cancer, Dendritic Cell Marker, Developmental Biology, Hematopoietic Stem Cells, Immuno Oncology, Immunology, Mesenchymal Stem Cell Differentiation