

CD45RA (Leucocyte Marker) Antibody - With BSA and Azide
Mouse Monoclonal Antibody [Clone SPM568]
Catalog # AH10691

Specification

CD45RA (Leucocyte Marker) Antibody - With BSA and Azide - Product Information

Application	IHC-P, IF, FC
Primary Accession	P08575
Other Accession	5788 , 654514
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG2a, kappa
Calculated MW	205-220kDa KDa

CD45RA (Leucocyte Marker) Antibody - With BSA and Azide - Additional Information

Gene ID 5788

Other Names

Receptor-type tyrosine-protein phosphatase C, 3.1.3.48, Leukocyte common antigen, L-CA, T200, CD45, PTPRC, CD45

Application Note

IHC-P ~ ~ N/A
IF ~ ~ 1:50 ~ 200
FC ~ ~ 1:10 ~ 50

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.

Storage

Store at 2 to 8°C. Antibody is stable for 24 months.

Precautions

CD45RA (Leucocyte Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

CD45RA (Leucocyte Marker) Antibody - With BSA and Azide - Protein Information

Name PTPRC ([HGNC:9666](#))

Synonyms CD45

Function

Protein tyrosine-protein phosphatase required for T-cell activation through the antigen receptor (PubMed: [35767951](http://www.uniprot.org/citations/35767951)). Acts as a positive regulator of T-cell coactivation upon binding to DPP4. The first PTPase domain

has enzymatic activity, while the second one seems to affect the substrate specificity of the first one. Upon T-cell activation, recruits and dephosphorylates SKAP1 and FYN. Dephosphorylates LYN, and thereby modulates LYN activity (By similarity). Interacts with CLEC10A at antigen presenting cell-T cell contact; CLEC10A on immature dendritic cells recognizes Tn antigen- carrying PTPRC/CD45 receptor on effector T cells and modulates T cell activation threshold to limit autoreactivity.

Cellular Location

Cell membrane; Single-pass type I membrane protein. Membrane raft. Synapse. Note=Colocalized with DPP4 in membrane rafts.

Tissue Location

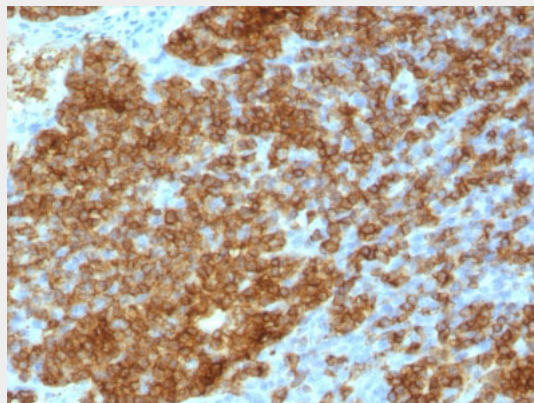
Isoform 1: Detected in thymocytes. Isoform 2: Detected in thymocytes. Isoform 3: Detected in thymocytes. Isoform 4: Not detected in thymocytes. Isoform 5: Detected in thymocytes. Isoform 6: Not detected in thymocytes. Isoform 7: Detected in thymocytes Isoform 8: Not detected in thymocytes.

CD45RA (Leucocyte Marker) Antibody - With BSA and Azide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CD45RA (Leucocyte Marker) Antibody - With BSA and Azide - Images



Formalin-fixed, paraffin-embedded human Tonsil stained with CD45RA Monoclonal Antibody (SPM568).

CD45RA (Leucocyte Marker) Antibody - With BSA and Azide - Background

Recognizes a protein of 205kDa-220kDa, identified as CD45RA. CD45RA is isoforms of the human leukocyte common antigen (CD45). Human CD45 contains three exons which encode peptide segments designated A, B and C, respectively. The differential splicing of the exons generates at least five isoforms, ABC, AB, BC, B and O. This antibody reacts with ABC and BC isoforms. CD45RA is expressed on 40-50% of peripheral CD4+ T-cells, 50% of peripheral CD8+ T-cells, B-cells, and

leukemic B-cell lines. T-cells expressing CD45RA are naive or virgin T-cells. T-cells expressing CD45RO are memory T-cells. CD45RA and CD45RO define complementary, predominantly non-overlapping populations of resting peripheral T-cells. This MAb is useful in study on the subpopulation of CD4+ or CD8+ T-cells. It can especially be used to differentiate T-cell lymphomas (CD45RO +ve) from B cell lymphomas (CD45RA +ve).

CD45RA (Leucocyte Marker) Antibody - With BSA and Azide - References

Oxford University Press, Oxford, p511-515, 1995. | Clement LT. J Clin Immunol. 1992, 12(1):1-10. | Yamada A, et al. Cell Immunol. 1992, 142(1):114-24. | Mahalingam M, et al. Clin Immunol Immunopathol. 1996,81(2):210-214. Jacob MC, et al. Am J Hematol. 1992, 39(1):45-5