

CD45RO (T-Cell Marker) Antibody - With BSA and Azide Mouse Monoclonal Antibody [Clone 190-2F2.5] Catalog # AH12170

Specification

CD45RO (T-Cell Marker) Antibody - With BSA and Azide - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW IF, FC <u>P08575</u> <u>5788, 654514</u> Human Mouse Monoclonal Mouse / IgG2a, kappa 180-185kDa KDa

CD45RO (T-Cell 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 IF~~1:50~200<br \>FC~~1:10~50

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

Precautions CD45RO (T-Cell Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

CD45RO (T-Cell 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). 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.

CD45RO (T-Cell Marker) Antibody - With BSA and Azide - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

CD45RO (T-Cell Marker) Antibody - With BSA and Azide - Images

CD45RO (T-Cell Marker) Antibody - With BSA and Azide - Background

Recognizes a 180-185kDa protein, identified as isoform of leukocyte common antigen (CD45RO). This antibody reacts with mature activated T-cells, most thymocytes, and a sub-population of resting T-cells within both CD4 and CD8 subsets. It shows no reactivity with normal B or natural killer cells, but reacts with granulocytes and monocytes. Reportedly, it is useful to identify T-cell lymphomas and leukemias. It rarely stains NK cells or B-cell lymphomas.

CD45RO (T-Cell Marker) Antibody - With BSA and Azide - References

Sparrow RL et al. A function for human T200 in natural killer (NK) cytolysis. Transplantation 36, 166171 (1983)