

CD7 (T-Cell Leukemia Marker) Antibody - With BSA and Azide Mouse Monoclonal Antibody [Clone C7/511] Catalog # AH12629

Specification

CD7 (T-Cell Leukemia Marker) Antibody - With BSA and Azide - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW IF, FC <u>P09564</u> <u>924, 186820</u> Human Mouse Monoclonal Mouse / IgG2a 40kDa KDa

CD7 (T-Cell Leukemia Marker) Antibody - With BSA and Azide - Additional Information

Gene ID 924

Other Names T-cell antigen CD7, GP40, T-cell leukemia antigen, T-cell surface antigen Leu-9, TP41, CD7, CD7

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 CD7 (T-Cell Leukemia Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

CD7 (T-Cell Leukemia Marker) Antibody - With BSA and Azide - Protein Information

Name CD7

Function

Transmembrane glycoprotein expressed by T-cells and natural killer (NK) cells and their precursors (PubMed:7506726). Plays a costimulatory role in T-cell activation upon binding to its ligand K12/SECTM1 (PubMed:10652336). In turn, mediates the production of cytokines such as IL-2 (PubMed:1709867). On resting NK-cells, CD7 activation results in a significant induction of interferon-gamma levels (PubMed:7506726).

Cellular Location



Membrane; Single-pass type I membrane protein.

Tissue Location

Expressed on T-cells and natural killer (NK) cells and their precursors.

CD7 (T-Cell Leukemia 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>

CD7 (T-Cell Leukemia Marker) Antibody - With BSA and Azide - Images

CD7 (T-Cell Leukemia Marker) Antibody - With BSA and Azide - Background

Recognizes a protein of 40kDa, identified as CD7, a member of the immunoglobulin gene superfamily. Its N-terminal amino acids 1-107 are highly homologous to Ig kappa-L chains whereas the carboxyl-terminal region of the extracellular domain is proline-rich and has been postulated to form a stalk from which the Ig domain projects. CD7 is expressed on the majority of immature and mature T-lymphocytes, and T cell leukemia. It is also found on natural killer cells, a small subpopulation of normal B cells and on malignant B cells. Cross-linking surface CD7 positively modulates T cell and NK cell activity as measured by calcium fluxes, expression of adhesion molecules, cytokine secretion and proliferation. CD7 associates directly with phosphoinositol 3'-kinase. CD7 ligation induces production of D-3 phosphoinositides and tyrosine phosphorylation.

CD7 (T-Cell Leukemia Marker) Antibody - With BSA and Azide - References

Miwa H, et al. Biological characteristics of CD7(+) acute leukemia. Leuk. Lymphoma. 1996, 21(3-4):239-244. Rabinowich H, et al. Signaling via CD7 molecules on human NK cells. Induction of tyrosine phosphorylation and beta 1 integrin-mediated adhesion to fibronectin J. Immunol. 1994;153(8):3504-3513. | Saxena A, et al. Biologic and clinical significance of CD7 expression in acute myeloid leukemia. Am J Hematol. 1998, 58(4):278-84