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

Mouse Monoclonal Antibody [Clone T3-3A1]
Catalog # AH12631

Specification

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

Application	**IF, FC**
Primary Accession	P09564
Other Accession	924, 186820
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**Mouse / IgG1, kappa**
Calculated MW	**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.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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

Haynes BF, et al. Human lymphocyte antigens: production of a monoclonal antibody that defines functional thymus-derived lymphocyte subsets. Proc. Natl. Acad. Sci. USA 76: 5829-5833, 1979. | Eisenbarth GS, et al. Production of monoclonal antibodies reacting with peripheral blood mononuclear cell surface differentiation antigens. J. Immunol. 124: 1237-1244, 1980. | Haynes BF, et al. Characterization of a monoclonal antibody that defines an immunoregulatory T cell subset for immunoglobulin synthesis in humans. Proc. Natl. Acad. Sci. USA 77: 2914-2918, 1980. | Prieyl JA, LeBien TW. Interleukin 7 independent development of human B cells. Proc. Natl. Acad. Sci. USA 93: 10348-10353, 1996