

# 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 Primary Accession** Other Accession Reactivity Host Clonality

Isotype Calculated MW IF, FC P09564 924, 186820 Human Mouse Monoclonal Mouse / IgG1, kappa

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**

<span class ="dilution IF">IF~~1:50~200</span><br \><span class</pre> ="dilution FC">FC $\sim$ 1:10 $\sim$ 50</span>

#### 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:<a href="http://www.uniprot.org/citations/7506726" target=" blank">7506726</a>). Plays a costimulatory role in T-cell activation upon binding to its ligand K12/SECTM1 (PubMed:<a href="http://www.uniprot.org/citations/10652336" target="\_blank">10652336</a>). In turn, mediates the production of cytokines such as IL-2 (PubMed:<a

href="http://www.uniprot.org/citations/1709867" target="\_blank">1709867</a>). On resting NK-cells, CD7 activation results in a significant induction of interferon-gamma levels (PubMed:<a href="http://www.uniprot.org/citations/7506726" target=" blank">7506726</a>).

## **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