

**CD7 (T-Cell Leukemia Marker) Antibody - With BSA and Azide**  
**Mouse Monoclonal Antibody [Clone B-F12 ]**  
**Catalog # AH12623**

### Specification

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

Application	,3,4,
Primary Accession	<a href="#">P09564</a>
Other Accession	<a href="#">924</a> , <a href="#">186820</a>
Reactivity	Human, Pig, Guinea Pig
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG2a, 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

#### 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:<<http://www.uniprot.org/citations/7506726>>7506726</a>). Plays a costimulatory role in T-cell activation upon binding to its ligand K12/SECTM1 (PubMed:<<http://www.uniprot.org/citations/10652336>>10652336</a>). In turn, mediates the production of cytokines such as IL-2 (PubMed:<<http://www.uniprot.org/citations/1709867>>1709867</a>). On resting NK-cells, CD7 activation results in a significant induction of interferon-gamma levels (PubMed:<<http://www.uniprot.org/citations/7506726>>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 Cytometry](#)
- [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 (also known as gp40, Leu9). CD7 is 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**

Knapp W et al. eds. Leukocyte typing IV, p341, Oxford University Press, Oxford, 1989.2. Miwa H, et al biological characteristics of CD7(+) acute leukemia. Leuk Lymphoma. 1996;21:239-44. 3. Rabinowich H, et al. J. Immunol. 1994 153(8):3504-3513.4. Emara M, et al. A human suppressor T-cell factor that inhibits T-cell replication by interaction with the IgM-Fc receptor (CD7). Hum Immunol. 1989;25(2):87-102.5. Thurlow PJ, A monoclonal antibody detecting a new human T cell antigen, HuLy-m2. Transplantation 1984, 38(2):143-147.6. Saxena A, et al. Biologic and clinical significance of CD7 expression in acute myeloid leukemia. Am J Hematol. 1998;58(4):278-84