

**CD7 Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO1805a****Specification****CD7 Antibody - Product Information**

Application	<b>E, WB, IHC</b>
Primary Accession	<a href="#">P09564</a>
Reactivity	<b>Human</b>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Isotype	<b>IgG1</b>
Calculated MW	<b>25.4kDa KDa</b>

**Description**

This gene encodes a transmembrane protein which is a member of the immunoglobulin superfamily. This protein is found on thymocytes and mature T cells. It plays an essential role in T-cell interactions and also in T-cell/B-cell interaction during early lymphoid development.

**Immunogen**

Purified recombinant fragment of human CD7 (AA: 72-175) expressed in E. Coli.

**Formulation**

Purified antibody in PBS with 0.05% sodium azide

**CD7 Antibody - 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

**Dilution**

E~~1/10000

WB~~1/500 - 1/2000

IHC~~1/200 - 1/1000

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

CD7 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**CD7 Antibody - 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.

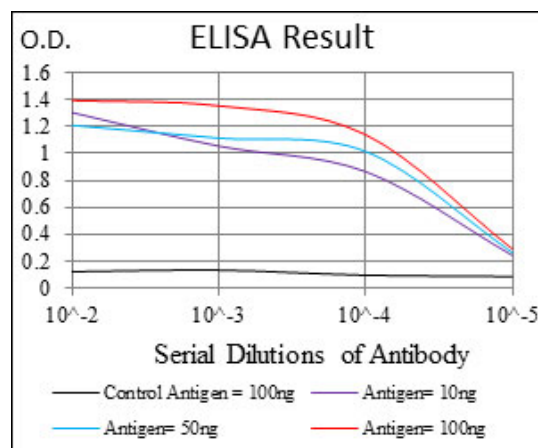
### Tissue Location

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

## CD7 Antibody - 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](#)



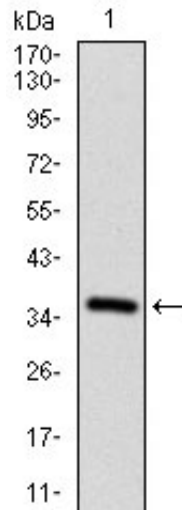


Figure 1: Western blot analysis using CD7 mAb against human CD7 recombinant protein. (Expected MW is 36.6 kDa)

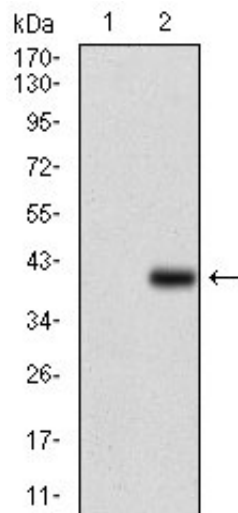


Figure 2: Western blot analysis using CD7 mAb against HEK293 (1) and CD7 (AA: 72-175)-hIgGFc transfected HEK293 (2) cell lysate.

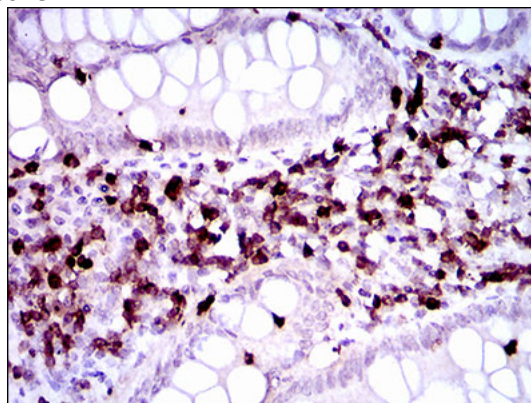


Figure 3: Immunohistochemical analysis of paraffin-embedded endometrial cancer tissues using CD7 mouse mAb with DAB staining.

### CD7 Antibody - Background

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#### **CD7 Antibody - References**

1. Mol Cancer. 2010 Feb 22;9:41. 2. J Hematol Oncol. 2010 Apr 14;3:15.