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CD7 Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1806a

Product Information

Application	WB, IHC, FC, E
Primary Accession	P09564
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	4D4F8
Isotype	IgG1
Calculated MW	25409
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

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	WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 FC~~1/200 - 1/400 E~~1/10000
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.

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.

Background

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.

References

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

Images

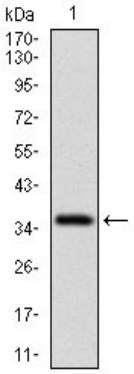


Figure 1: Western blot analysis using CD7 mAb against human CD7 recombinant protein. (Expected MW is 36.6 kDa)

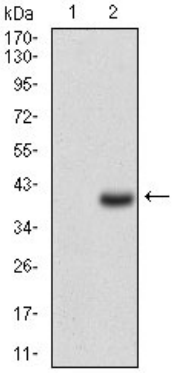


Figure 2: Western blot analysis using CD7 mAb against HEK293 (1) and CD7 (AA: 72-175)-hIgGFc transfected HEK293 (2) cell lysate.

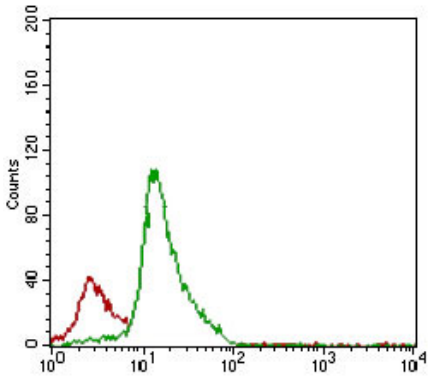
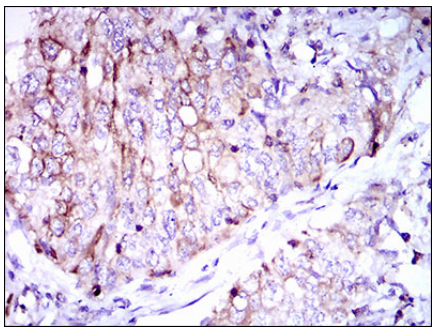


Figure 3: Flow cytometric analysis of Jurkat cells using CD7 mouse mAb (green) and negative control (red).

Figure 5: Immunohistochemical analysis of paraffin-embedded lung cancer tissues using CD7 mouse



mAb with DAB staining.