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CD7 Rabbit mAb

Catalog # AP75234

Product Information

Application	WB, IHC-P, IHC-F, FC, IP
Primary Accession	P09564
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	25409

Additional Information

Gene ID	924
Other Names	CD7
Dilution	WB~~1:1000-1:5000 IHC-P~~N/A IHC-F~~N/A FC~~1:50-1:100 IP~~1:10-1:100
Format	Liquid in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

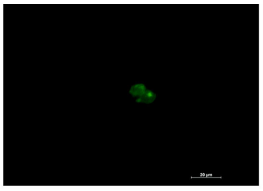
Name	CD7
Function	Transmembrane glycoprotein expressed by T-cells and natural killer (NK) cells and their precursors (PubMed:7506726). Plays a costimulatory role in T-cell activation upon binding to its ligand K12/SECTM1 (PubMed:10652336). In turn, mediates the production of cytokines such as IL-2 (PubMed:1709867). 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

CD7 is a 40 kD type I transmembrane glycoprotein also known as gp40. It is a member of the

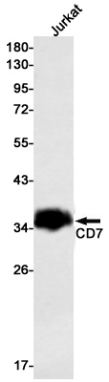
immunoglobulin superfamily found on T cells, NK cells, thymocytes, hematopoietic progenitors, and monocytes (weakly). CD7 is also expressed on acute lymphocytic leukemia (ALL) and some acute myeloid leukemia (AML) cells. CD7 crosslinking induces a calcium flux in T lymphocytes, presumably as a result of cytoplasmic domain association with PI3-kinase. CD7 costimulation can induce cytokine secretion and modulate cellular adhesion.

Images

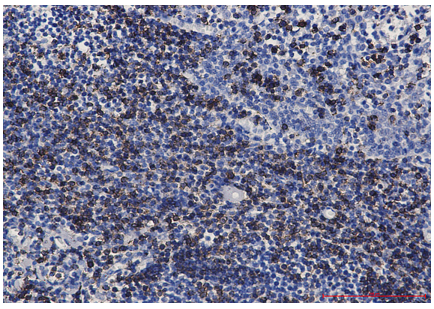




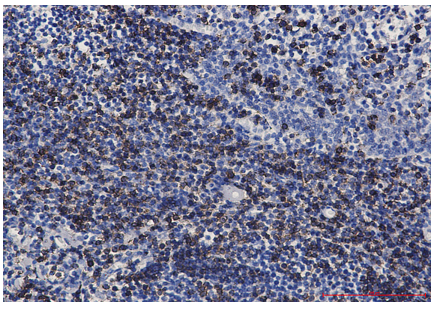
Immunocytochemistry analysis of CD7 (green) in Jurkat using CD7 antibody,and DAPI(blue).

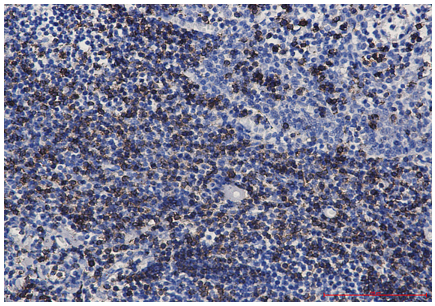


Western blot analysis of CD7 in Jurkat lysates using CD7 antibody.



Immunohistochemistry analysis of paraffin-embedded Human tonsil using CD7 antibody. High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval.





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