

Anti-CD53 Antibody

Catalog # AP95746

Product Information

Application	WB, IHC, FC
Primary Accession	P19397
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	24341

Additional Information

Gene ID	963
Other Names	MOX44; TSPAN25; Leukocyte surface antigen CD53; Cell surface glycoprotein CD53; Tetraspanin-25; Tspan-25; CD53
Target/Specificity	Recombinant fusion protein of human CD53 expressed in E. Coli
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 FC~~FC (1/100 - 1/200)
Format	Mouse IgG2a. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	CD53
Synonyms	MOX44, TSPAN25
Function	Structural component of specialized membrane microdomains known as tetraspanin-enriched microdomains (TERMs), which act as platforms for receptor clustering and signaling (PubMed:28487417). Participates thereby in diverse biological functions such as cell signal transduction, adhesion, migration and protein trafficking (PubMed:32974937, PubMed:35767951). Plays a role in the activation of monocytes and B-cells (PubMed:8335905). Acts as an essential regulator of B-cell development by promoting interleukin-7 receptor/IL7R signaling (By similarity). Also promotes, in B-cells, the BCR signaling by recruiting PKC to the plasma membrane in order to phosphorylate its substrates (PubMed:28487417). Plays an essential role in B- and T-cells homing to lymph nodes by stabilizing L-selectin/SELL cell surface expression (By similarity). Also mediates metabolic and inflammatory functions in hepatocytes and adipose tissue by promoting TNF and LPS signaling independent of the immune compartment (By similarity).

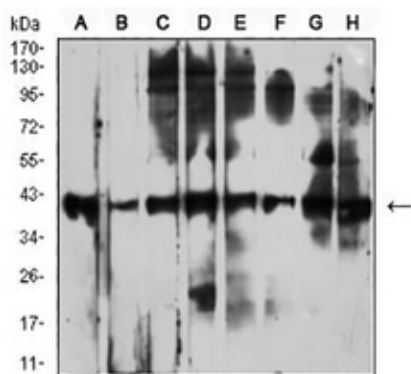
Cellular Location

Cell membrane. Cell junction {ECO:0000250|UniProtKB:Q61451}. Membrane; Multi-pass membrane protein. Synapse. Note=Concentrates in localized microdomains along the plasma membrane at the contact sites between cells of fused myotubes. {ECO:0000250|UniProtKB:Q61451}

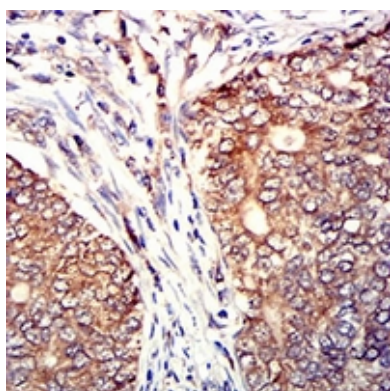
Tissue Location

B-cells, monocytes, macrophages, neutrophils, single (CD4 or CD8) positive thymocytes and peripheral T-cells

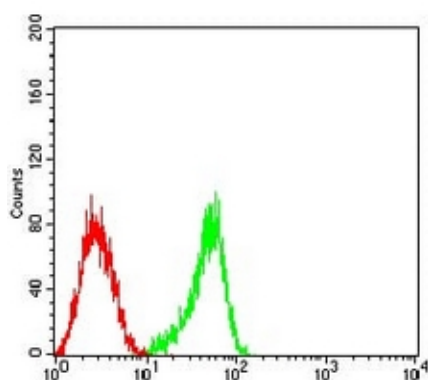
Images



Western blot analysis of CD53 expression in Raji (A), Ramos (B), Jurkat (C), MOLT4 (D), K562 (E), HL60 (F), THP1 (G), U937 (H) whole cell lysates. (Predicted band size: 24 kD; Observed band size: 40 kD)



Immunohistochemical analysis of CD53 staining in human cervical cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Flow cytometric analysis of HL60 cells using Anti-CD53 Antibody (green) and negative control (red).

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