

CD53 Polyclonal Antibody

Catalog # AP73774

Product Information

Application	WB
Primary Accession	<u>P19397</u>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	24341

Additional Information

Gene ID	963
Other Names	CD53; MOX44; TSPAN25; Leukocyte surface antigen CD53; Cell surface glycoprotein CD53; Tetraspanin-25; Tspan-25; CD53
Dilution	WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

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: <u>28487417</u>). Participates thereby in diverse biological functions such as cell signal transduction, adhesion, migration and protein trafficking (PubMed: <u>32974937</u> , PubMed: <u>35767951</u>). Plays a role in the activation of monocytes and B-cells (PubMed: <u>8335905</u>). 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: <u>28487417</u>). 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-alpha 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

Background

Required for efficient formation of myofibers in regenerating muscle at the level of cell fusion. May be involved in growth regulation in hematopoietic cells (By similarity).

Images



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