

Recombinant Anti-CD53 Rabbit mAb

Catalog # AP95311

Product Information

Application	WB, IHC, FC, IF/IC
Primary Accession	P19397
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal
Calculated MW	24341

Additional Information

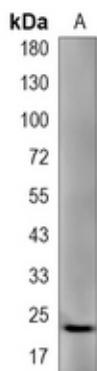
Gene ID	963
Other Names	MOX44; TSPAN25; Leukocyte surface antigen CD53; Cell surface glycoprotein CD53; Tetraspanin-25; Tspan-25; CD53
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within human CD53 protein. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 FC~~1:10~50 IF/IC~~N/A
Format	Liquid in PBS, pH 7.3, 50% glycerol, 0.05% BSA, and 0.05% Proclin300.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

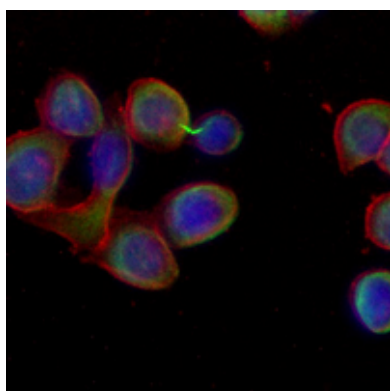
Name	CD53
Synonyms	MOX44, TSPAN25
Function	Structural component of specialized membrane microdomains known as tetraspanin-enriched microdomains (TERMs), which act as platforms for receptor clustering and signaling (PubMed: 28487417). Participates thereby in diverse biological functions such as cell signal 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 Jurkat (A) whole cell lysates. (Predicted band size: 24 kD; Observed band size: 24 kD)



Immunofluorescent analysis of CD53 staining in Jurkat cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with an AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.