

Anti-CD53 Monoclonal Antibody

Catalog # ABO14753

Specification

Anti-CD53 Monoclonal Antibody - Product Information

Application WB, IHC, IF, ICC, FC **Primary Accession** P19397 Rabbit Host Isotype Rabbit IgG Reactivity Human Clonality Monoclonal Format Liquid Description Anti-CD53 Monoclonal Antibody . Tested in WB, IHC, ICC/IF, Flow Cytometry applications. This antibody reacts with Human.

Anti-CD53 Monoclonal Antibody - Additional Information

Gene ID 963

Other Names Leukocyte surface antigen CD53, Cell surface glycoprotein CD53, Tetraspanin-25, Tspan-25, CD53, CD53, MOX44, TSPAN25

Application Details WB 1:500-1:2000
IHC 1:50-1:200
ICC/IF 1:100-1:500
FC 1:50

Contents Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

Immunogen A synthesized peptide derived from human CD53 May be involved in growth regulation in hematopoietic cells.

Purification Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

Anti-CD53 Monoclonal Antibody - 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-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

Anti-CD53 Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-CD53 Monoclonal Antibody - Images





Western blot analysis of CD53 expression in Jurkat cell lysate.