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# Anti-CD53 Antibody (clone MEM-53)

Mouse Anti Human Monoclonal Antibody
Catalog # ALS17635

## Product Information

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| **Application** | WB, IHC-P, IHC-F, IP, FC |
| **Primary Accession** | P19397 |
| **Predicted** | Human |
| **Host** | Mouse |
| **Clonality** | Monoclonal |
| **Isotype** | IgG1 |
| **Clone Names** | MEM-53 |
| **Calculated MW** | 24341 |
| **Concentration (mg/ml)** | 1 mg/ml |

## Additional Information

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| **Gene ID** | 963 |
| **Alias Symbol** | CD53 |
| **Other Names** | CD53, CD53 antigen, CD53 molecule, CD53 tetraspan antigen, Cell surface antigen, Leukocyte surface antigen CD53, Transmembrane glycoprotein, Tetraspanin-25, Tspan-25, CD53 glycoprotein, Cell surface glycoprotein CD53, MOX44, TSPAN25 |
| **Reconstitution & Storage** | Protein G purified |
| **Precautions** | Anti-CD53 Antibody (clone MEM-53) is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **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- |

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| | 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 |