

CD53 (TSPAN25) Antibody - With BSA and Azide
Mouse Monoclonal Antibody [Clone 63-5A3]
Catalog # AH12760

Specification

CD53 (TSPAN25) Antibody - With BSA and Azide - Product Information

Application	,3,4,
Primary Accession	P19397
Other Accession	963, 443057
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG2b, kappa
Calculated MW	33-55kDa KDa

CD53 (TSPAN25) Antibody - With BSA and Azide - Additional Information

Gene ID 963

Other Names

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

Storage

Store at 2 to 8°C. Antibody is stable for 24 months.

Precautions

CD53 (TSPAN25) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

CD53 (TSPAN25) Antibody - With BSA and Azide - Protein Information

Name CD53

Synonyms MOX44, TSPAN25

Function

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).

Cellular Location

Cell membrane. Cell junction. Membrane; Multi-pass membrane protein. Note=Concentrates in localized microdomains along the plasma membrane at the contact sites between cells of fused myotubes.

Tissue Location

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

CD53 (TSPAN25) Antibody - With BSA and Azide - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CD53 (TSPAN25) Antibody - With BSA and Azide - Images

CD53 (TSPAN25) Antibody - With BSA and Azide - Background

Recognizes a protein of 33-55kDa, identified as CD53 (Workshop V; Code CD53.1). CD53 is expressed on monocytes, and macrophages, granulocytes, dendritic cells, osteoblasts and osteoclasts, NK cells, and on T- and B-cells from every stage of differentiation but is absent from platelets, erythrocytes, and non-haemopoietic cells. CD53 is a member of a family of tetraspan transmembrane proteins, including CD9, CD37, CD63, CD81, and CD82. It associates with integrins, MHC class II molecules, and a tyrosine phosphatase and plays a role in cellular activation as part of a signal transduction complex involving other membrane glycoproteins. Defects of CD53 expression on neutrophils appear to be related with recurrent infectious diseases. Cross-linking CD53 using CD53 antibodies led to cytoplasmic calcium fluxes in B cells, monocytes, and granulocytes and activation of the monocyte oxidative burst.

CD53 (TSPAN25) Antibody - With BSA and Azide - References

Knapp, W. et al., Leucocyte typing IV, p 534 and p 541. Oxford Univ. Press. 1989 | Schlossman SF et al. eds. Leukocyte Typing V, p556-559, Oxford University Press, Oxford, 1995. | Kishimoto T et al. eds. Leukocyte Typing VI, Garland Publishing, New York, 1997. | Olweus J et al. CD53, a protein with four membrane-spanning domains, mediates signal transduction in human monocytes and B cells. J Immunol 1993, 151(2):707-716. | Mannion BA et al. Transmembrane-4 superfamily proteins CD81 (TAPA-1), CD82, CD63, and CD53 specifically associated with integrin $\alpha\text{L}\beta\text{2}$ (CD49d/CD29). J Immunol 1996, 157(5):2039-2047. | Carmo AM et al. Association of the transmembrane 4-superfamily molecule CD53 with a tyrosine phosphatase activity. Eur J Immunol 1995, 25(7):2090-2095. | Mollinedo F et al. Recurrent infectious diseases in human CD53 deficiency. Clin Diagn Lab Immunol 1997, 4(2):229-231