

CD53 monoclonal antibody, clone MEM-53 (FITC)

Catalog # MAB4639

Size 100 Reactions

Specification

Product Description	Mouse monoclonal antibody raised against native CD53.
Immunogen	Native purified CD53 from leukocytes of patient suffering from LGL-type leukaemia.
Host	Mouse
Theoretical MW (kDa)	32-40
Reactivity	Human
Specificity	This antibody reacts with CD53, a 32-40 KDa tetraspanin family glycoprotein exclusively expressed on leukocytes; it is not present on platelets, red blood cells and non-hematopoietic cells. This antibody reacts also with deglycosylated molecule (molecular weight of the antigen is reduced by 15 KDa using endoglycosidase F).
Form	Liquid
Conjugation	FITC
Isotype	IgG1
Recommend Usage	Flow Cytometry (20 ul in human blood cells 100 ul in whole blood or 10^6 cells in a suspension) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.2% BSA, 0.09% sodium azide)
Storage Instruction	Store in the dark at 4°C. Do not freeze. Avoid prolonged exposure to light. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Flow Cytometry

Gene Info — CD53

Entrez GeneID

[963](#)

Gene Name

CD53

Gene Alias

MOX44, TSPAN25

Gene Description

CD53 molecule

Omim ID

[151525](#)

Gene Ontology

[Hyperlink](#)

Gene Summary

The protein encoded by this gene is a member of the transmembrane 4 superfamily, also known as the tetraspanin family. Most of these members are cell-surface proteins that are characterized by the presence of four hydrophobic domains. The proteins mediate signal transduction events that play a role in the regulation of cell development, activation, growth and motility. This encoded protein is a cell surface glycoprotein that is known to complex with integrins. It contributes to the transduction of CD2-generated signals in T cells and natural killer cells and has been suggested to play a role in growth regulation. Familial deficiency of this gene has been linked to an immunodeficiency associated with recurrent infectious diseases caused by bacteria, fungi and viruses. Alternative splicing results in multiple transcript variants encoding the same protein. [provided by RefSeq]

Other Designations

CD53 antigen|CD53 glycoprotein|CD53 tetraspan antigen|OTTHUMP00000013686|OTTHUMP0000059505|antigen MOX44 identified by monoclonal antibody MRC-OX44|cell surface antigen||eukocyte surface antigen CD53|tetraspanin-25|transmembrane glycoprotein

Publication Reference

- [Supramolecular complexes of MHC class I, MHC class II, CD20, and tetraspan molecules \(CD53, CD81, and CD82\) at the surface of a B cell line JY.](#)

Szöllősi J, Horejsi V, Bene L, Angelisová P, Damjanovich S.

The Journal of Immunology 1996 Oct; 157(7):2939.

Application: Flow Cyt, Human, JY B-lymphoma cell

- [Cross-linking of CD53 promotes activation of resting human B lymphocytes.](#)

Rasmussen AM, Blomhoff HK, Stokke T, Horejsi V, Smeland EB.

The Journal of Immunology 1994 Dec; 153(11):4997.

- [Monoclonal antibodies against human leucocyte antigens. III. Antibodies against CD45R, CD6, CD44 and two newly described broadly expressed glycoproteins MEM-53 and MEM-102.](#)

Bazil V, Stefanová I, Hilgert I, Kristofová H, Vaněk S, Bukovský A, Horejsí V.

Folia Biol (Praha) 1989 Jan; 35(5):289.

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