

Datasheet: MCA723G

Description:	MOUSE ANTI HUMAN CD53
Specificity:	CD53
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	MEM-53
Isotype:	IgG1
Quantity:	0.2 mg

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/10 - 1/25
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting (1)	▪			

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

(1)Clone MEM-53 recognizes human CD53 under non-reducing conditions.

Target Species	Human
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide
Approx. Protein Concentrations	IgG concentration 1 mg/ml

External Database**Links****UniProt:**[P19397](#)[Related reagents](#)**Entrez Gene:**[963](#)

CD53

[Related reagents](#)**Synonyms**

MOX44, TSPAN25

RRID

AB_2075724

Specificity

Mouse anti Human CD53 antibody, clone MEM-53 recognizes the human CD53 cell surface antigen, also known as Tetraspanin-25. CD53 is a 219 amino acid multi pass transmembrane glycoprotein of 32-42 kDa. CD53 is expressed by all leucocytes, but is absent from erythrocytes and platelets.

Flow Cytometry

Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.

References

1. Bazil, V. *et al.* (1989) Monoclonal antibodies against human leucocyte antigens. III. Antibodies against CD45R, CD6, CD44 and two newly described broadly expressed glycoproteins MEM-53 and MEM-102. [Folia Biol \(Praha\). 35 \(5\): 289-97.](#)
2. Angelisová P *et al.* (1990) The human leucocyte surface antigen CD53 is a protein structurally similar to the CD37 and MRC OX-44 antigens. [Immunogenetics. 32 \(4\): 281-5.](#)
3. Mollinedo, F. *et al.* (1997) Recurrent infectious diseases in human CD53 deficiency. [Clin Diagn Lab Immunol. 4: 229-31.](#)
4. Matsumoto K *et al.* (1999) Functional expression of transmembrane 4 superfamily molecules on human eosinophils. [Int Arch Allergy Immunol. 120 Suppl 1: 38-44.](#)
5. Spring, F.A. *et al.* (2013) Tetraspanins CD81 and CD82 facilitate $\alpha\beta 1$ -mediated adhesion of human erythroblasts to vascular cell adhesion molecule-1. [PLoS One. 8 \(5\): e62654.](#)
6. Tippett, E. *et al.* (2013) Characterization of tetraspanins CD9, CD53, CD63, and CD81 in monocytes and macrophages in HIV-1 infection. [J Leukoc Biol. 93 \(6\): 913-20.](#)
7. de Winde, C.M. *et al.* (2015) Multispectral imaging reveals the tissue distribution of tetraspanins in human lymphoid organs. [Histochem Cell Biol. 144 \(2\): 133-46.](#)
8. Zuidscherwoude, M. *et al.* (2015) The tetraspanin web revisited by super-resolution microscopy. [Sci Rep. 5: 12201.](#)
9. Dunlock, V.E. *et al.* (2022) Tetraspanin CD53 controls T cell immunity through regulation of CD45RO stability, mobility, and function. [Cell Rep. 39 \(13\): 111006.](#)

Storage

This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at $2-8^{\circ}\text{C}$ for short term use (up to 4 weeks) and store the remaining aliquots at -20°C .

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

Guarantee

12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10040 available at:
<https://www.bio-rad-antibodies.com/SDS/MCA723G>
10040

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...) [HRP](#)
Rabbit Anti Mouse IgG (STAR12...) [RPE](#)
Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)
Goat Anti Mouse IgG (STAR76...) [RPE](#)
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)
Goat Anti Mouse IgG (STAR70...) [FITC](#)
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®550](#),
[DyLight®650](#), [DyLight®680](#), [DyLight®800](#),
[FITC](#), [HRP](#)
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)
'M410524:221028'

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