

Datasheet: MCA723F

BATCH NUMBER 151251

Description:	MOUSE ANTI HUMAN CD53:FITC
Specificity:	CD53
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	MEM-53
Isotype:	IgG1
Quantity:	100 TESTS

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	▪			Neat

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

Target Species	Human		
Product Form	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	FITC	490	525
Preparation	Purified IgG prepared by ion exchange chromatography		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% Sodium Azide		
Stabilisers	1% Bovine Serum Albumin		
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml		

**External Database
Links**

UniProt:

[P19397](#) [Related reagents](#)

Entrez Gene:

[963](#) CD53 [Related reagents](#)

Synonyms

MOX44, TSPAN25

RRID

AB_321780

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 1 x 10⁶ 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. 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.](#)
5. Matsumoto K *et al.* (1999) Functional expression of transmembrane 4 superfamily molecules on human eosinophils. [Int Arch Allergy Immunol. 120 Suppl 1: 38-44.](#)
6. Spring, F.A. *et al.* (2013) Tetraspanins CD81 and CD82 facilitate α4β1-mediated adhesion of human erythroblasts to vascular cell adhesion molecule-1. [PLoS One. 8 \(5\): e62654.](#)
7. 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.](#)
8. Zuidscherwoude, M. *et al.* (2015) The tetraspanin web revisited by super-resolution microscopy. [Sci Rep. 5: 12201.](#)

Storage

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.

Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee

12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10041 available at:
<https://www.bio-rad-antibodies.com/SDS/MCA723F>
10041

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:FITC \(MCA928F\)](#)

Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

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
----------------------------------	---	------------------	---	---------------	---

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)
'M368841:200529'

Printed on 25 Mar 2023

© 2023 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)