

## Datasheet: MCA1054F

Description:	MOUSE ANTI HUMAN CD59:FITC
Specificity:	CD59
Other names:	HRF, PROTECTIN
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	MEM-43
lsotype:	lgG2a
Quantity:	0.1 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 <u>www.bio-rad-antibodies.com/protocols</u> .					
		Yes	No	Not Determined	Suggested Dilution	
	Flow Cytometry	•			Neat	
	Where this antibody ha	as not been te	sted for	use in a particular te	echnique this does not	
	necessarily exclude its a guide only. It is recor system using appropria	mmended that	the use	er titrates the antibod	ing dilutions are given as ly for use in their own	
Target Species	Human					
Product Form	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid					
Max Ex/Em	Fluorophore	Excitation Ma	x (nm)	Emission Max (nm)		
	FITC	490		525	-	
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant					
Buffer Solution	Phosphate buffered saline					
Preservative	0.09% sodium azide (N	NaN <sub>3</sub>				
Stabilisers	1% bovine serum albu	min				
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml					

Immunogen	Thymocytes and T lymphocytes.
External Database Links	UniProt: <u>P13987</u> <u>Related reagents</u> Entrez Gene: <u>966</u> CD59 <u>Related reagents</u>
Synonyms	MIC11, MIN1, MIN2, MIN3, MSK21
RRID	AB_321510
Specificity	<b>Mouse anti Human CD59 antibody, clone MEM-43</b> recognizes CD59, a glycosyl- phosphatidylinositol (GPI) anchored membrane protein also known as membrane attack complex inhibition factor. CD59 blocks the formation of the complement membrane attack complex (MAC) by binding of C8a and C9. CD59 is found on all types of leucocytes including platelets and is also expressed on many non-haematopoietic cells. The epitope recognized by Mouse anti Human CD59 antibody, clone MEM-43 is lost after reduction therefore, non-reducing conditions are required for western blotting techniques.
Flow Cytometry	Use 10µl of the suggested working dilution to label $10^6$ cells or $100µl$ whole blood
References	<ol> <li>Horejsí, V. <i>et al.</i> (1988) Monoclonal antibodies against human leucocyte antigens. II. Antibodies against CD45 (T200), CD3 (T3), CD43, CD10 (CALLA), transferrin receptor (T9), a novel broadly expressed 18-kDa antigen (MEM-43) and a novel antigen of restricted expression (MEM-74). Folia Biol (Praha). 34 (1): 23-34.</li> <li>Stefanová, I. <i>et al.</i> (1989) Characterization of a broadly expressed human leucocyte surface antigen MEM-43 anchored in membrane through phosphatidylinositol. Mol Immunol. 26 (2): 153-61.</li> <li>Stefanová, I. <i>et al.</i> (1989) in Leucocyte Typing IV: White cell differentiation antigens. Ed. Knapp, W. <i>et al.</i> Oxford University Press pp 678-97.</li> <li>Stefanová, I. &amp; Horejsí, V. (1991) Association of the CD59 and CD55 cell surface glycoproteins with other membrane molecules. J Immunol. 147 (5): 1587-92.</li> <li>Tandon, N. <i>et al.</i> (1994) Expression and function of multiple regulators of complement activation in autoimmune thyroid disease. Immunology. 81 (4): 643-7.</li> <li>Vanderplasschen, A. <i>et al.</i> (1997) Extracellular enveloped vaccinia virus is resistant to complement because of incorporation of host complement control proteins into its envelope. <u>Proc Natl Acad Sci U S A. 95: 7544-9.</u></li> <li>Cowan, P.J. <i>et al.</i> (1998) High-level endothelial expression of human CD59 prolongs heart function in an <i>ex vivo</i> model of xenograft rejection. <u>Transplantation. 65: 826-31.</u></li> <li>Chong, Y.H. and Lee, M.J. (2000) Expression of complement inhibitor protein CD59 in human neuronal and glial cell lines treated with HIV-1 gp41 peptides. <u>J Neurovirol. 6:</u> <u>51-60.</u></li> <li>Shamri, R. <i>et al.</i> (2002) Chemokine stimulation of lymphocyte alpha 4 integrin avidity but not of leukocyte function-associated antigen-1 avidity to endothelial ligands under shear flow requires cholesterol membrane rafts. J Biol Chem. 277: 40027-35.</li> <li>Zhang, J. <i>et al.</i> (2002) Early complement activation and decreased levels of</li> </ol>

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	Mediated Intravascular and Extravascular Hemolysis. <u>J Immunol. 201 (3): 1021-1029.</u>
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	complement-dependent cytotoxicity. <u>Mol Cell Endocrinol. 490: 57-67.</u>
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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°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. This product is photosensitive and should be
	protected from light.
Guarantoo	10 months from data of despetab
Guarantee	12 months from date of despatch
Health And Safety	Material Safety Datasheet documentation #10041 available at:
Information	https://www.bio-rad-antibodies.com/SDS/MCA1054F
	10041

## **Related Products Recommended Negative Controls** MOUSE IgG2a NEGATIVE CONTROL:FITC (MCA929F) **Recommended Useful Reagents** HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B) North & South Tel: +1 800 265 7376 Worldwide Tel: +44 (0)1865 852 700 Tel: +49 (0) 89 8090 95 21 Europe America Fax: +1 919 878 3751 Fax: +44 (0)1865 852 739 Fax: +49 (0) 89 8090 95 50 Email: antibody\_sales\_us@bio-rad.com Email: antibody\_sales\_uk@bio-rad.com 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 'M410480:221028'

## Printed on 26 Jun 2024

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