

Datasheet: MCA1054A647

Description:	MOUSE ANTI HUMAN CD59:Alexa Fluor® 647		
Specificity:	CD59		
Other names:	HRF, PROTECTIN		
Format:	ALEXA FLUOR® 647		
Product Type:	Monoclonal Antibody		
Clone:	MEM-43		
Isotype:	lgG2a		
Quantity:	100 TESTS/1ml		

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 N	10	Not Determined	Suggested Dilution
	Flow Cytometry	-			Neat
	Where this antibody have	as not been test	ed for u	use in a particular teo	chnique 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 Alexa Fluor 647 - liquid				
Max Ex/Em	Fluorophore	Excitation Max	(nm) l	Emission Max (nm)	
	Alexa Fluor®647	650		665	
Preparation	Purified IgG prepared supernatant	by affinity chrom	natogra	phy on Protein A froi	m tissue culture
Buffer Solution	Phosphate buffered saline				
Preservative Stabilisers	0.09% sodium azide (NaN ₃) 1% bovine serum albumin				
Approx. Protein Concentrations	IgG concentration 0.05 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_324803
Specificity	Mouse anti Human CD59 antibody, clone MEM-43 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	 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. 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. 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. Stefanová, I. & Horejsí, V. (1991) Association of the CD59 and CD55 cell surface glycoproteins with other membrane molecules. J Immunol. 147 (5): 1587-92. 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. 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> 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> 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> 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. Zhang, J. <i>et al.</i> (2002) Early complement activation and decreased levels of

	glycosylphosphatidylinositol-anchored complement inhibitors in human and experimental
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	levels of CD46 and CD59 in target cells. <u>J Gen Virol. 88: 1415-22.</u>
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	individual PNH erythrocytes. <u>J Hematol Oncol. 10 (1): 126.</u>
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	Mediated Intravascular and Extravascular Hemolysis. J Immunol. 201 (3): 1021-1029.
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	complement-dependent cytotoxicity. Mol Cell Endocrinol. 490: 57-67.
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.
Guarantee	12 months from date of despatch
Acknowledgements	The Alexa Fluor dye antibody conjugates in this product are sold under license from
	Molecular Probes, Inc. for research use only, except for use in combination with
	microarrays, and are covered by pending and issued patents.

Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA1054A647 10041			
Regulatory	For research purposes only			
Related Products				

Recommended Negative Controls

MOUSE IgG2a NEGATIVE CONTROL:Alexa Fluor® 647 (MCA929A647)

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)

North & South	Tel: +1 800 265 7376	Worldwide	Tel: +44 (0)1865 852 700	Europe	Tel: +49 (0) 89 8090 95 21
America	Fax: +1 919 878 3751		Fax: +44 (0)1865 852 739		Fax: +49 (0) 89 8090 95 50
	Email: antibody_sales_us@bio-ra	ad.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 'M410478:221028'

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