Datasheet: MCA1054PE

BATCH NUMBER INN170222

Description:	MOUSE ANTI HUMAN CD59:RPE
Specificity:	CD59
Other names:	HRF, PROTECTIN
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	MEM-43
Isotype:	IgG2a
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 R. Phycoerythrin (RPE) - lyophilized

Reconstitution

Reconstitute with 1.0 ml distilled water

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
RPE 488nm laser	496	578

Preparation

Purified IgG prepared by affinity chromatography on Protein A

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.09% Sodium Azide
1% Bovine Serum Albumin
5% Sucrose

Immunogen	Thymocytes and T lymphocytes.
External Database Links	**UniProt:** P13987 Related reagents **Entrez Gene:** 966 CD59 Related reagents
Synonyms	MIC11, MIN1, MIN2, MIN3, MSK21
RRID	AB_321512
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 10ul of the suggested working dilution to label 10^6 cells in 100ul.
References	1. Stefanova, I. *et al*. (1989) in Leucocyte Typing IV: White cell differentiation antigens. Ed. Knapp, W. *et al*. Oxford University Press pp 678-97. 2. Stefanová, I. *et al.* (1989) Characterization of a broadly expressed human leucocyte surface antigen MEM-43 anchored in membrane through phosphatidylinositol. Mol Immunol. 26 (2): 153-61. 3. Tandon, N. *et al.* (1994) Expression and function of multiple regulators of complement activation in autoimmune thyroid disease. Immunology. 81 (4): 643-7. 4. Horejsí, V. *et al.* (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. 5. Stefanová, I. & Horejsí, V. (1991) Association of the CD59 and CD55 cell surface glycoproteins with other membrane molecules. J Immunol. 147 (5): 1587-92. 6. Shaw, M.L. *et al.* (2008) Cellular proteins in influenza virus particles. PLoS Pathog. 4: e1000085. 7. Sadallah, S. *et al.* (2011) Microparticles (ectosomes) shed by stored human platelets downregulate macrophages and modify the development of dendritic cells. J Immunol. 186: 6543-52. 8. Jolly, C, and Sattentau. Q.J. (2005) Human Immunodeficiency Virus Type 1 Virological Synapse Formation in T Cells Requires Lipid Raft Integrity J Virol. 79: 12088-94. 9. Shamri, R. *et al.* (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. 10. Bonnon, C. *et al.* (2010) Selective export of human GPI-anchored proteins from the endoplasmic reticulum. J Cell Sci. 123: 1705-15.

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19. Sica, M. *et al.* (2017) Eculizumab treatment: stochastic occurrence of C3 binding to individual PNH erythrocytes. J Hematol Oncol. 10 (1): 126.
20. Ueda, M. *et al.* (2019) Endovascular trophoblast expresses CD59 to evade complement-dependent cytotoxicity. Mol Cell Endocrinol. 490: 57-67.
21. Rondelli, T. *et al.* (2013) The frequency of granulocytes with spontaneous somatic mutations: a wide distribution in a normal human population. PLoS One. 8 (1): e54046.
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Storage	Prior to reconstitution store at +4°C. Following reconstitution store at +4°C. DO NOT FREEZE. This product should be stored undiluted. This product is photosensitive and should be protected from light. 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 #20487 available at: https://www.bio-rad-antibodies.com/SDS/MCA1054PE 20487
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG2a NEGATIVE CONTROL:RPE (MCA929PE)

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

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'M375256:210104'

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