

Datasheet: MCA2142FT

BATCH NUMBER 164806

Description:	MOUSE ANTI HUMAN CD63:FITC
Specificity:	CD63
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	MEM-259
Isotype:	IgG1
Quantity:	25 µg

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 - 1/10

Where this product 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 product 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 affinity chromatography on Protein A from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% sodium azide (NaN ₃)		
Stabilisers	1% bovine serum albumin		
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml		

Immunogen	HPB-ALL cell line.
External Database Links	<p>UniProt: P08962 Related reagents</p> <p>Entrez Gene: 967 CD63 Related reagents</p>
Synonyms	MLA1, TSPAN30
RRID	AB_2076628
Specificity	<p>Mouse anti Human CD63 antibody, clone MEM-259 recognizes the CD63 cell surface antigen, also known as granulophysin, lysosomal associated membrane protein 3 (LAMP-3), Melanoma-associated antigen ME491, Ocular melanoma-associated antigen or tetraspanin-30. CD63 is a 238 amino acid, tetraspanin glycoprotein of ~40-60 kDa.</p> <p>CD63 is expressed by monocytes, macrophages, endothelial cells where it is a component of Weibel-Palade bodies (Vischer et al. 1993) and by a variety of cell lines. It is located intracellularly in lysosomal granules of platelets, being translocated to the surface upon activation. It may therefore be useful as a marker of platelet activation (Hamamoto et al. 1994). CD63 expression is also associated with melanoma development (Radford et al. 1997) and expression is rapidly down-regulated by progesterone in endometrial tissues (Okada et al. 1999).</p>
Flow Cytometry	Use 10µl of the suggested working dilution to label 10 ⁶ cells in 100µl or 100µl whole blood
References	<ol style="list-style-type: none"> Casey, T.M. <i>et al.</i> (2007) Organelle proteomics: identification of the exocytic machinery associated with the natural killer cell secretory lysosome. Mol Cell Proteomics. 6 (5): 767-80. Durand-Panteix, S. <i>et al.</i> (2012) B7-H1, which represses EBV-immortalized B cell killing by autologous T and NK cells, is oppositely regulated by c-Myc and EBV latency III program at both mRNA and secretory lysosome levels. J Immunol. 189 (1): 181-90. Abdel-Latif, D. <i>et al.</i> (2004) Rac2 is critical for neutrophil primary granule exocytosis. Blood. 104: 832-9. Norling, L.V. <i>et al.</i> (2012) Resolvin D1 limits polymorphonuclear leukocyte recruitment to inflammatory loci: receptor-dependent actions. Arterioscler Thromb Vasc Biol. 32 (8): 1970-8. McKechnie, N.M. <i>et al.</i> (2006) Fas-ligand is stored in secretory lysosomes of ocular barrier epithelia and released with microvesicles. Exp Eye Res. 83: 304-14. Spring, F.A. <i>et al.</i> (2013) Tetraspanins CD81 and CD82 facilitate α4β1-mediated adhesion of human erythroblasts to vascular cell adhesion molecule-1. PLoS One. 8(5):e62654. Pliyev, B.K. (2008) Activated human neutrophils rapidly release the chemotactically active D2D3 form of the urokinase-type plasminogen activator receptor (uPAR/CD87). Mol Cell Biochem. 321: 111-22. Suraeva, N.M. <i>et al.</i> (2015) Changes in the Morphological and Immunological

Characteristics of Mel Ibr Melanoma Cells in Response to Chicken Embryo Extract. [Bull Exp Biol Med. 159 \(4\): 520-3.](#)

9. Schäfer, T. *et al.* (2010) A granular variant of CD63 is a regulator of repeated human mast cell degranulation. [Allergy. 65 \(10\): 1242-55.](#)

10. Jakhria, T. *et al.* (2014) β 2-microglobulin amyloid fibrils are nanoparticles that disrupt lysosomal membrane protein trafficking and inhibit protein degradation by lysosomes. [J Biol Chem. 289 \(52\): 35781-94.](#)

11. Ethier, C. *et al.* (2016) Calcitriol Reduces Eosinophil Necrosis Which Leads to the Diminished Release of Cytotoxic Granules. [Int Arch Allergy Immunol. 171 \(2\): 119-29.](#)

12. Nielsen, M.H. *et al.* (2023) Increased extracellular vesicles (EVs) related to T cell-mediated inflammation and vascular function in familial hypercholesterolemia. [Atheroscler Plus. 53: 16-25.](#)

13. Ilarraza, R. *et al.* (2023) Rac2 regulates immune complex-mediated granule polarization and exocytosis in neutrophils. [J Leukoc Biol. 114 \(2\): 116-125.](#)

14. Vrancx, C. *et al.* (2021) Mechanism of Cellular Formation and *In Vivo* Seeding Effects of Hexameric β -Amyloid Assemblies. [Mol Neurobiol. 58 \(12\): 6647-69.](#)

15. Gratpain, V. *et al.* (2024) Influence of a pro-inflammatory stimulus on the miRNA and lipid content of human dental stem cell-derived extracellular vesicles and their impact on microglial activation [Heliyon. : e27025.](#)

16. Cinato, M. *et al.* (2021) Apilimod alters TGF β signaling pathway and prevents cardiac fibrotic remodeling. [Theranostics. 11 \(13\): 6491-506.](#)

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

Health And Safety Information

Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2142FT>
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 \(BUF070B\)](#)

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)

North & South Tel: +1 800 265 7376

America 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

'M413033:221117'

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_de@bio-rad.com

Printed on 19 Apr 2024

© 2024 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)