

## Datasheet: MCA2142

**BATCH NUMBER 163863**

<b>Description:</b>	MOUSE ANTI HUMAN CD63
<b>Specificity:</b>	CD63
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	MEM-259
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.2 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 [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/25 - 1/100
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting			▪	
Immunofluorescence	▪			

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

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide
<b>Approx. Protein</b>	IgG concentration 1.0 mg/ml

## Concentrations

---

**Immunogen** HPB-ALL cell line.

---

## External Database Links

**UniProt:**

[P08962](#)     [Related reagents](#)

**Entrez Gene:**

[967](#)     CD63     [Related reagents](#)

---

**Synonyms** MLA1, TSPAN30

---

**RRID** AB\_324562

---

## Specificity

**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.

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](#)).

---

## Flow Cytometry

Use 10ul of the suggested working dilution to label 10<sup>6</sup> cells in 100ul or 100ul whole blood.

---

## References

1. Casey, T.M. *et al.* (2007) Organelle proteomics: identification of the exocytic machinery associated with the natural killer cell secretory lysosome. [Mol Cell Proteomics. 6 \(5\): 767-80.](#)
2. Durand-Panteix, S. *et al.* (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.](#)
3. Abdel-Latif, D. *et al.* (2004) Rac2 is critical for neutrophil primary granule exocytosis. [Blood. 104: 832-9.](#)
4. Norling, L.V. *et al.* (2012) Resolvin D1 limits polymorphonuclear leukocyte recruitment to inflammatory loci: receptor-dependent actions. [Arterioscler Thromb Vasc Biol. 32 \(8\): 1970-8.](#)
5. McKechnie, N.M. *et al.* (2006) Fas-ligand is stored in secretory lysosomes of ocular barrier epithelia and released with microvesicles. [Exp Eye Res. 83: 304-14.](#)
6. Spring, F.A. *et al.* (2013) Tetraspanins CD81 and CD82 facilitate  $\alpha$ 4 $\beta$ 1-mediated adhesion of human erythroblasts to vascular cell adhesion molecule-1. [PLoS One. 8\(5\):e62654.](#)
7. 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.](#)

8. Suraveva, N.M. *et al.* (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)  $\beta$ 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.](#)

---

**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.

---

**Guarantee** 12 months from date of despatch

---

**Health And Safety Information** Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2142>  
10040

---

**Regulatory** For research purposes only

---

## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...) [RPE](#)  
Goat Anti Mouse IgG IgA IgM (STAR87...) [HRP](#)  
Goat Anti Mouse IgG (STAR76...) [RPE](#)  
Goat Anti Mouse IgG (STAR70...) [FITC](#)  
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®550](#),  
[DyLight®650](#), [DyLight®680](#), [DyLight®800](#),  
[FITC](#), [HRP](#)  
Goat Anti Mouse IgG (STAR77...) [HRP](#)  
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)  
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)  
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

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](mailto: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](mailto:antibody_sales_uk@bio-rad.com)

'M410513:221028'

**Europe**

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: [antibody\\_sales\\_de@bio-rad.com](mailto:antibody_sales_de@bio-rad.com)

**Printed on 19 Apr 2024**

---

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