

## Datasheet: MCA2142

**BATCH NUMBER 162943**

<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
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml

Immunogen	HPB-ALL cell line.
External Database Links	<p><b>UniProt:</b>  <a href="#">P08962</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">967</a>    CD63    <a href="#">Related reagents</a></p>
Synonyms	MLA1, TSPAN30
RRID	AB_324562
Specificity	<p><b>Mouse anti Human CD63 antibody, clone MEM-259</b> 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 (<a href="#">Vischer et al. 1993</a>) 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 (<a href="#">Hamamoto et al. 1994</a>). CD63 expression is also associated with melanoma development (<a href="#">Radford et al. 1997</a>) and expression is rapidly down-regulated by progesterone in endometrial tissues (<a href="#">Okada et al. 1999</a>).</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul or 100ul whole blood.
References	<ol style="list-style-type: none"> <li>Casey, T.M. <i>et al.</i> (2007) Organelle proteomics: identification of the exocytic machinery associated with the natural killer cell secretory lysosome. <a href="#">Mol Cell Proteomics. 6 (5): 767-80.</a></li> <li>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. <a href="#">J Immunol. 189 (1): 181-90.</a></li> <li>Abdel-Latif, D. <i>et al.</i> (2004) Rac2 is critical for neutrophil primary granule exocytosis. <a href="#">Blood. 104: 832-9.</a></li> <li>Norling, L.V. <i>et al.</i> (2012) Resolvin D1 limits polymorphonuclear leukocyte recruitment to inflammatory loci: receptor-dependent actions. <a href="#">Arterioscler Thromb Vasc Biol. 32 (8): 1970-8.</a></li> <li>McKechnie, N.M. <i>et al.</i> (2006) Fas-ligand is stored in secretory lysosomes of ocular barrier epithelia and released with microvesicles. <a href="#">Exp Eye Res. 83: 304-14.</a></li> <li>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. <a href="#">PLoS One. 8(5):e62654.</a></li> <li>Pliyev, B.K. (2008) Activated human neutrophils rapidly release the chemotactically active D2D3 form of the urokinase-type plasminogen activator receptor (uPAR/CD87). <a href="#">Mol Cell Biochem. 321: 111-22.</a></li> </ol>

8. Suraeva, 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.](#)

<b>Storage</b>	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.
<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2142">https://www.bio-rad-antibodies.com/SDS/MCA2142</a> 10040
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Secondary Antibodies

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

### Recommended Negative Controls

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

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
----------------------------------	---	------------------	---	---------------	---

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)  
'M383733:210513'

**Printed on 05 Mar 2024**

---

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