

Datasheet: MCA2315GA

Description:	MOUSE ANTI PIG CD107a
Specificity:	CD107a
Other names:	LAMP-1
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	4E9/11
Isotype:	IgG1
Quantity:	0.1 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.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry (1)	▪			1/25 - 1/50
Immunohistology - Frozen	▪			
Immunohistology - Paraffin (2)	▪			
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting	▪			

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.

(1) Membrane permeabilization is required for this application. The use of Leucoperm (Product Code [BUF09](#)) is recommended for this purpose.

(2) This product requires antigen retrieval using heat treatment prior to staining of paraffin sections.

Sodium citrate buffer pH 6.0 is recommended for this purpose.

Target Species	Pig
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture

supernatant

Buffer Solution	Phosphate buffered saline
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Preservative Stabilisers	0.09% sodium azide (NaN ₃)
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Carrier Free	Yes
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Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
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Immunogen	Porcine alveolar macrophages.
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Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse X63-Ag.8.653 myeloma cell line.
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Specificity	<p>Mouse anti Pig CD107a, clone 4E9/11 recognizes porcine CD107a, a cell surface antigen, also known as lysosomal-associated membrane protein-1 or LAMP-1.</p> <p>CD107a is a type 1 single pass transmembrane glycoprotein expressed on macrophages and more weakly on monocytes and granulocytes.</p>
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Flow Cytometry	Use 10µl of the suggested working dilution to label 1x10 ⁶ cells in 100µl
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Histology Positive Control Tissue	Porcine spleen
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References	<ol style="list-style-type: none">1. Bullido, R. <i>et al.</i> (1997) Monoclonal antibodies specific for porcine monocytes/macrophages: macrophage heterogeneity in the pig evidenced by the expression of surface antigens. Tissue Antigens. 49 (4): 403-13.2. Carrillo, A. <i>et al.</i> (2002) Isolation and characterization of immortalized porcine aortic endothelial cell lines. Vet Immunol Immunopathol. 89 (1-2): 91-8.3. Domenech, N. <i>et al.</i> (2003) Identification of porcine macrophages with monoclonal antibodies in formalin-fixed, paraffin-embedded tissues. Vet Immunol Immunopathol. 94 (1-2): 77-81.4. Sánchez-Torres, C. <i>et al.</i> (2003) Expression of porcine CD163 on monocytes/macrophages correlates with permissiveness to African swine fever infection. Arch Virol. 148 (12): 2307-23.5. Toka, F.N. <i>et al.</i> (2009) Natural killer cell dysfunction during acute infection with foot-and-mouth disease virus. Clin Vaccine Immunol. 16: 1738-49.6. Bullers, S.J. <i>et al.</i> (2014) The human tissue-biomaterial interface: a role for PPARγ-dependent glucocorticoid receptor activation in regulating the CD163+ M2 macrophage phenotype. Tissue Eng Part A. 20: 2390-401.7. Mair, K.H. <i>et al.</i> (2013) Porcine CD8αdim/-NKp46high NK cells are in a highly activated state. Vet Res. 44: 13.8. Cruz, J.L. <i>et al.</i> (2013) Alphacoronavirus Protein 7 Modulates Host Innate Immune Response J Virol. 87: 9754-67.9. van Hout, G.P. <i>et al.</i> (2015) Invasive surgery reduces infarct size and preserves cardiac
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- function in a porcine model of myocardial infarction. [J Cell Mol Med. 19 \(11\): 2655-63.](#)
10. Toka, F.N. *et al.* (2009) Activation of porcine natural killer cells and lysis of foot-and-mouth disease virus infected cells. [J Interferon Cytokine Res. 29 \(3\): 179-92.](#)
11. Dash, R. *et al.* (2018) Dose-Dependent Cardioprotection of Moderate (32°C) Versus Mild (35°C) Therapeutic Hypothermia in Porcine Acute Myocardial Infarction. [JACC Cardiovasc Interv. 11 \(2\): 195-205.](#)
12. Talker, S.C. *et al.* (2015) Magnitude and kinetics of multifunctional CD4+ and CD8β+ T cells in pigs infected with swine influenza A virus. [Vet Res. 46: 52.](#)

Further Reading 1. Piriou-Guzylack, L. (2008) Membrane markers of the immune cells in swine: an update. [Vet Res. 39: 54.](#)

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/MCA2315GA>
10040

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

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

Recommended Negative Controls

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

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

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