

Datasheet: MCA2315A647

Description:	MOUSE ANTI PIG CD107a:Alexa Fluor® 647
Specificity:	CD107a
Other names:	LAMP-1
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	4E9/11
Isotype:	IgG1
Quantity:	100 TESTS/1ml

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)	■			Neat

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.

(1) **Membrane permeabilisation is required for this application. Bio-Rad recommends the use of Leucoperm™ (Product Code [BUF09](#)) for this purpose.**

Target Species	Pig						
Product Form	Purified IgG conjugated to Alexa Fluor® 647- liquid						
Max Ex/Em	<table border="1"> <thead> <tr> <th>Fluorophore</th> <th>Excitation Max (nm)</th> <th>Emission Max (nm)</th> </tr> </thead> <tbody> <tr> <td>Alexa Fluor®647</td> <td>650</td> <td>665</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	Alexa Fluor®647	650	665
Fluorophore	Excitation Max (nm)	Emission Max (nm)					
Alexa Fluor®647	650	665					
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant						
Buffer Solution	Phosphate buffered saline						
Preservative	0.09% Sodium Azide						
Stabilisers	1% Bovine Serum Albumin						
Approx. Protein Concentrations	IgG concentration 0.05mg/ml						
Immunogen	Porcine alveolar macrophages.						
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse X63-Ag.8.653 myeloma cell line.						

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>
Flow Cytometry	Use 10ul of the suggested working dilution to label 1×10^6 cells in 100ul.
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 function in a porcine model of myocardial infarction. J Cell Mol Med. 19 (11): 2655-63. 10. Toka, F.N. <i>et al.</i> (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. <i>et al.</i> (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. <i>et al.</i> (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	<p>Store at +4°C or at -20°C if preferred.</p> <p>This product should be stored undiluted.</p> <p>Storage in frost free freezers is not recommended. This product is photosensitive and should be protected from light.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
Shelf Life	18 months from date of despatch.
Acknowledgements	This product is provided under an intellectual property licence from Life Technologies Corporation.

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Health And Safety Information Material Safety Datasheet documentation #10041 available at:
10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA928A647\)](#)

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