

Datasheet: MCA2315F BATCH NUMBER 148403

| Description: | MOUSE ANTI PIG CD107a:FITC |
|---------------|----------------------------|
| Specificity: | CD107a |
| Other names: | LAMP-1 |
| Format: | FITC |
| Product Type: | Monoclonal Antibody |
| Clone: | 4E9/11 |
| lsotype: | lgG1 |
| 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 <u>www.bio-</u> | | | |
| | 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 <u>BUF09</u>) for this purpose. | | | | |

| Target Species | Pig | | | |
|-----------------------------|---|----------------------------|-------------------------|---|
| Product Form | Purified IgG conjugate | (FITC) - liquid | | |
| Max Ex/Em | Fluorophore FITC | Excitation Max (nm) 490 | Emission Max (nm 525 |) |
| Preparation | Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant | | | |
| Buffer Solution | Phosphate buffered saline | | | |
| Preservative Stabilisers | 0.09% Sodium Azide 1% Bovine Serum / | Albumin | | |

| Approx. Protein Concentrations | IgG concentration 0.1 mg/ml |
|-----------------------------------|---|
| Immunogen | Porcine alveolar macrophages. |
| RRID | AB_566439 |
| Fusion Partners | Spleen cells from immunised BALB/c mice were fused with cells of the mouse X63-Ag.8.653 myeloma cell line. |
| Specificity | 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. |
| | CD107a is a type 1 single pass transmembrane glycoprotein expressed on macrophages and more weakly on monocytes and granulocytes. |
| Flow Cytometry | Use 10ul of the suggested working dilution to label 1×10^6 cells in 100ul. |
| | monocytes/macrophages: macrophage heterogeneity in the pig evidenced by the expression of surface antigens. <u>Tissue Antigens. 49 (4): 403-13.</u> 2. Carrillo, A. <i>et al.</i> (2002) Isolation and characterization of immortalized porcine aortic endothelial cell lines. <u>Vet Immunol Immunopathol. 89 (1-2): 91-8.</u> 3. Domenech, N. <i>et al.</i> (2003) Identification of porcine macrophages with monoclonal antibodies in formalin-fixed, paraffin-embedded tissues. <u>Vet Immunol Immunopathol. 94 (1-2): 77-81.</u> 4. Sánchez-Torres, C. <i>et al.</i> (2003) Expression of porcine CD163 on monocytes/macrophages correlates with permissiveness to African swine fever infection. <u>Arch Virol. 148 (12): 2307-23.</u> 5. Toka, F.N. <i>et al.</i> (2009) Natural killer cell dysfunction during acute infection with foot-and-mouth disease virus. <u>Clin Vaccine Immunol. 16: 1738-49.</u> 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. <u>Tissue Eng Part A. 20: 2390-401.</u> 7. Mair, K.H. <i>et al.</i> (2013) Porcine CD8αdim/-NKp46high NK cells are in a highly activated state. <u>Vet Res. 44: 13.</u> 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 updat <u>Vet Res. 39: 54.</u> | te. |
|----------------------------------|---|-----|
| Storage | Store at +4°C or at -20°C if preferred. | |
| | This product should be stored undiluted. | |
| | Storage in frost free freezers is not recommended. This product is photosensitive and should be protected from light. | |
| | Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use. | |
| 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/MCA2315F 10041 | |
| Regulatory | For research purposes only | |

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:FITC (MCA928F)

| North & South | Tel: +1 800 265 7376 | Worldwide | Tel: +44 (0)1865 852 700 | Europe | Tel: +49 (0) 89 8090 95 21 |
|---------------|-----------------------------------|-----------|-----------------------------------|--------|--------------------------------------|
| America | Fax: +1 919 878 3751 | | Fax: +44 (0)1865 852 739 | | Fax: +49 (0) 89 8090 95 50 |
| | Email: antibody_sales_us@bio-rad. | .com | Email: antibody_sales_uk@bio-rad. | .com | Email: antibody_sales_de@bio-rad.com |

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M366635:200529'

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