

# Datasheet: MCA2309GA

**BATCH NUMBER 152016**

|                      |                       |
|----------------------|-----------------------|
| <b>Description:</b>  | MOUSE ANTI PIG CD11R3 |
| <b>Specificity:</b>  | CD11R3                |
| <b>Format:</b>       | Purified              |
| <b>Product Type:</b> | Monoclonal Antibody   |
| <b>Clone:</b>        | 2F4/11                |
| <b>Isotype:</b>      | IgG1                  |
| <b>Quantity:</b>     | 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](http://www.bio-rad-antibodies.com/protocols).

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

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) Removal of sodium azide is recommended prior to use in functional assays - Bio-Rad recommend the use of [EQU003](#) for this purpose.**

|                        |   |
|------------------------|---|
| <b>Target Species</b>  | Pig   |
| <b>Product Form</b>    | Purified IgG - liquid   |
| <b>Preparation</b>     | Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant |
| <b>Buffer Solution</b> | Phosphate buffered saline   |
| <b>Preservative</b>    | 0.09% Sodium Azide (NaN <sub>3</sub> )  |

## Stabilisers

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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 immunized BALB/c mice were fused with cells of the X63-Ag.8.653 myeloma cell line |
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|-------------|---|
| Specificity | <p><b>Mouse anti Pig CD11R3, clone 2F4/11</b> recognizes porcine CD11R3, a ~155 kDa cell surface glycoprotein, member of the alpha integrin family. Mouse anti Pig CD11R3, clone 2F4/11 was clustered as CD11R3 at the Third International Workshop on Swine Leukocyte Differentiation Antigens (<a href="#">Haverson et al. 2001</a>). CD11R3 has a similar expression pattern to the human CD11b marker, being expressed on granulocytes, monocytes and alveolar macrophages, but not on lymphocytes, erythrocytes or platelets (<a href="#">Dominguez et al. 2001</a>).</p> <p>Mouse anti Pig CD11R3, clone 2F4/11 is reported to block phagocytosis of complement-opsonized zymosan particles by polymorphonuclear granulocytes and alveolar macrophages (<a href="#">Bullido et al. 1996</a>).</p> |
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| Flow Cytometry | Use 10ul of the suggested working dilution to 1x10 <sup>6</sup> cells in 100ul |
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|-----------------------------------|----------------|
| Histology Positive Control Tissue | Porcine spleen |
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|------------------|---|
| Western Blotting | Clone 2F4/11 detects a band of approximately 155 kDa in alveolar macrophage lysates under reducing conditions |
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| References | <ol style="list-style-type: none"><li>1. Sbrana, S. <i>et al.</i> (2014) Phenotype Changes of Circulating Monocytes in a Hypercholesterolemic Swine Model of Coronary Artery Disease <a href="#">J Cytol Histol 5:270</a></li><li>2. Domínguez, J. <i>et al.</i> (2001) Workshop studies on monoclonal antibodies in the myeloid panel with CD11 specificity. <a href="#">Vet Immunol Immunopathol. 80 (1-2): 111-9.</a></li><li>3. Sánchez-Torres C <i>et al.</i> (2003) Expression of porcine CD163 on monocytes/macrophages correlates with permissiveness to African swine fever infection. <a href="#">Arch Virol. 148 (12): 2307-23.</a></li><li>4. Van de Walle, G.R. <i>et al.</i> (2003) Transmission of pseudorabies virus from immune-masked blood monocytes to endothelial cells. <a href="#">J Gen Virol. 84 (Pt 3): 629-37.</a></li><li>5. Alvarez, B. <i>et al.</i> (2000) Molecular and functional characterization of porcine LFA-1 using monoclonal antibodies to CD11a and CD18. <a href="#">Xenotransplantation 7: 258-266</a></li><li>6. Sánchez, C. <i>et al.</i> (1999) The porcine 2A10 antigen is homologous to human CD163 and related to macrophage differentiation. <a href="#">J Immunol. 162: 5230-7</a></li><li>7. Thorgersen, E.B. <i>et al.</i> (2010) Anti-inflammatory effects of C1-Inhibitor in porcine and human whole blood are independent of its protease inhibition activity. <a href="#">Innate Immun. 16: 254-64</a></li><li>8. Thorgersen, E.B. <i>et al.</i> (2010) CD14 inhibition efficiently attenuates early inflammatory and hemostatic responses in <i>Escherichia coli</i> sepsis in pigs. <a href="#">FASEB J. 24: 712-22</a></li></ol> |
|------------|---|

9. Baert K *et al.* (2015) Cell type-specific differences in  $\beta$ -glucan recognition and signalling in porcine innate immune cells. [Dev Comp Immunol. 48 \(1\): 192-203.](#)
10. Barratt-Due, A. *et al.* (2011) *Ornithodoros moubata* Complement Inhibitor Is an Equally Effective C5 Inhibitor in Pigs and Humans. [J Immunol. 187: 4913-9](#)
11. Jacobsen, M.J. *et al.* (2016) Altered Methylation Profile of Lymphocytes Is Concordant with Perturbation of Lipids Metabolism and Inflammatory Response in Obesity. [J Diabetes Res. 2016: 8539057.](#)
12. Crisci, E. *et al.* (2012) Chimeric calicivirus-like particles elicit specific immune responses in pigs. [Vaccine. 30 \(14\): 2427-39.](#)
13. Debeer, S. *et al.* (2013) Comparative histology and immunohistochemistry of porcine versus human skin. [Eur J Dermatol. 23 \(4\): 456-66.](#)
14. Westover, A.J. *et al.* (2016) An Immunomodulatory Device Improves Insulin Resistance in Obese Porcine Model of Metabolic Syndrome. [J Diabetes Res. 2016: 3486727.](#)
15. LeLuduec, J.B. *et al.* (2016) Intradermal vaccination with un-adjuvanted sub-unit vaccines triggers skin innate immunity and confers protective respiratory immunity in domestic swine. [Vaccine. 34 \(7\): 914-22.](#)

|                                      |   |
|--------------------------------------|---|
| <b>Further Reading</b>               | 1. Piriou-Guzylack, L. (2008) Membrane markers of the immune cells in swine: an update. <a href="#">Vet Res. 39: 54</a>   |
| <b>Storage</b>                       | Store at +4°C or at -20°C if preferred.<br>Storage in frost-free freezers is not recommended.<br>This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use. |
| <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/MCA2309GA">https://www.bio-rad-antibodies.com/SDS/MCA2309GA</a><br>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>   |
| Rabbit Anti Mouse IgG (STAR13...)       | <a href="#">HRP</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> ,<br><a href="#">DyLight®650</a> , <a href="#">DyLight®680</a> , <a href="#">DyLight®800</a> ,<br><a href="#">FITC</a> , <a href="#">HRP</a> |
| Rabbit Anti Mouse IgG (STAR9...)        | <a href="#">FITC</a>  |

Goat Anti Mouse IgG (STAR77...) [HRP](#)  
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)

## Recommended Negative Controls

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

|                                  |   |                  |   |               |   |
|----------------------------------|---|------------------|---|---------------|---|
| <b>North &amp; South America</b> | Tel: +1 800 265 7376<br>Fax: +1 919 878 3751<br>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<br>Fax: +44 (0)1865 852 739<br>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<br>Fax: +49 (0) 89 8090 95 50<br>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://bio-rad-antibodies.com/datasheets)

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