

Datasheet: MCA2309GA

#### **BATCH NUMBER 156280**

Specificity: CD11R3  Format: Purified	IG CD11R3
- Tallieu	
Product Type: Monoclonal Antil	body
<b>Clone:</b> 2F4/11	
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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	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 <u>EQU003</u> for this purpose.

Target Species	Pig	
Product Form	Purified IgG - liquid	
Preparation	Purified IgG prepared by affinity chromatography on Protein G supernatant	6 from tissue culture
Buffer Solution	Phosphate buffered saline	
Preservative	0.09% Sodium Azide (NaN <sub>3</sub> )	

Stabilisers	
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Porcine alveolar macrophages
Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells of the X63-Ag.8.653 myeloma cell line
Specificity	Mouse anti Pig CD11R3, clone 2F4/11 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 (Haverson et al. 2001). CD11R3 has a similar expression pattern to the human CD11b marker, being expressed on granulocytes, monocytes and alveolar macrophages, but not on lymphocytes, eythrocytes or platelets (Dominguez et al. 2001).
	Mouse anti Pig CD11R3, clone 2F4/11 is reported to block phagocytosis of complement-opsonized zymosan particles by polymorphonuclear granulocytes and alveolar macrophages (Bullido et al. 1996).
Flow Cytometry	Use 10ul of the suggested working dilution to 1x10 <sup>6</sup> cells in 100ul
Histology Positive Control Tissue	Porcine spleen
Western Blotting	Clone 2F4/11 detects a band of approximately 155 kDa in alveolar macrophage lysates under reducing conditions
References	<ol> <li>Sbrana, S. <i>et al.</i> (2014) Phenotype Changes of Circulating Monocytes in a Hypercholesterolemic Swine Model of Coronary Artery Disease J Cytol Histol 5:270</li> <li>Domínguez, J. <i>et al.</i> (2001) Workshop studies on monoclonal antibodies in the myeloid panel with CD11 specificity. Vet Immunol Immunopathol. 80 (1-2): 111-9.</li> <li>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.     </li> <li>Van de Walle, G.R. <i>et al.</i> (2003) Transmission of pseudorabies virus from immunemasked blood monocytes to endothelial cells. J Gen Virol. 84 (Pt 3): 629-37.</li> <li>Alvarez, B. <i>et al.</i> (2000) Molecular and functional characterization of porcine LFA-1 using monoclonal antibodies to CD11a and CD18. Xenotransplantation 7: 258-266</li> <li>Sánchez, C. <i>et al.</i> (1999) The porcine 2A10 antigen is homologous to human CD163 and related to macrophage differentiation. J Immunol. 162: 5230-7</li> <li>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. Innate Immun. 16: 254-64</li> </ol>

and hemostatic responses in *Escherichia coli* sepsis in pigs. <u>FASEB J. 24: 712-22</u>

- 9. Baert K et al. (2015) Cell type-specific differences in β-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.

#### **Further Reading**

1. Piriou-Guzylack, L. (2008) Membrane markers of the immune cells in swine: an update.

Vet Res. 39: 54

#### **Storage**

Store at +4°C or at -20°C if preferred.

Storage in frost-free freezers is not recommended.

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.

### 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/MCA2309GA

10040

Regulatory

For research purposes only

## Related Products

#### **Recommended Secondary Antibodies**

Rabbit Anti Mouse IgG (STAR12...) **RPE** 

Goat Anti Mouse IgG IgA IgM (STAR87...) HRP

Goat Anti Mouse IgG (STAR76...) **RPE** 

Rabbit Anti Mouse IgG (STAR13...) **HRP** 

Goat Anti Mouse IgG (STAR70...) **FITC** 

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 (STAR9...) **FITC**  Goat Anti Mouse IgG (STAR77...) <u>HRP</u>

Goat Anti Mouse IgG (Fc) (STAR120...) FITC, HRP

# **Recommended Negative Controls**

#### MOUSE IgG1 NEGATIVE CONTROL (MCA928)

 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

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M366619:200529'

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