

Datasheet: MCA2309F

BATCH NUMBER 171961

Description:	MOUSE ANTI PIG CD11R3:FITC
Specificity:	CD11R3
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	2F4/11
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	▪			Neat - 1/10

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.

Target Species	Pig		
Product Form	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	FITC	490	525
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% sodium azide (NaN ₃)		
Stabilisers	1% bovine serum albumin		
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml		

Immunogen	Porcine alveolar macrophages
RRID	AB_2129270
Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells of the X63-Ag.8.653 myeloma cell line
Specificity	<p>Mouse anti Pig CD11R3, clone 2F4/11 recognizes porcine CD11R3, a ~155 kDa cell surface glycoprotein, member of the alpha integrin family.</p> <p>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, erythrocytes or platelets (Dominguez et al. 2001).</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 (Bullido et al. 1996).</p>
Flow Cytometry	Use 10µl of the suggested working dilution to 1x10 ⁶ cells in 100µl
References	<ol style="list-style-type: none"> 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 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. 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. Van de Walle, G.R. <i>et al.</i> (2003) Transmission of pseudorabies virus from immune-masked blood monocytes to endothelial cells. J Gen Virol. 84 (Pt 3): 629-37. 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 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 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 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. FASEB J. 24: 712-22 Baert K <i>et al.</i> (2015) Cell type-specific differences in β-glucan recognition and signalling in porcine innate immune cells. Dev Comp Immunol. 48 (1): 192-203. Barratt-Due, A. <i>et al.</i> (2011) <i>Ornithodoros moubata</i> Complement Inhibitor Is an Equally Effective C5 Inhibitor in Pigs and Humans. J Immunol. 187: 4913-9 Jacobsen, M.J. <i>et al.</i> (2016) Altered Methylation Profile of Lymphocytes Is Concordant with Perturbation of Lipids Metabolism and Inflammatory Response in Obesity. J Diabetes Res. 2016: 8539057. Crisci, E. <i>et al.</i> (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.](#)
16. Grodeland, G. *et al.* (2020) Targeting of HA to chemokine receptors induces strong and cross-reactive T cell responses after DNA vaccination in pigs. [Vaccine. 38 \(6\): 1280-1285.](#)
17. Teuben, M.P.J. *et al.* (2021) Standardized porcine unilateral femoral nailing is associated with changes in PMN activation status, rather than aberrant systemic PMN prevalence. [Eur J Trauma Emerg Surg. Jun 10 \[Epub ahead of print\].](#)
18. Teuben, M. *et al.* (2021) Instant intra-operative neutropenia despite the emergence of banded (CD16^{dim}/CD62L^{bright}) neutrophils in peripheral blood - An observational study during extensive trauma-surgery in pigs. [Injury. 52 \(3\): 426-33.](#)
19. Zhou, L. *et al.* (2022) Clinical improvement of sepsis by extracorporeal centrifugal leukocyte apheresis in a porcine model. [J Transl Med. 20 \(1\): 538.](#)

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. This product is photosensitive and should be protected from light.

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/MCA2309F>

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:FITC \(MCA928F\)](#)

Product inquiries: www.bio-rad-antibodies.com/technical-support

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M445072:250819'

