Datasheet: MCA2309PE

Description:	MOUSE ANTI PIG CD11R3:RPE
Specificity:	CD11R3
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	2F4/11
Isotype:	IgG1
Quantity:	100 TESTS

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

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 R. Phycoerythrin (RPE) - lyophilized

Reconstitution

Reconstitute with 1 ml distilled water

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
RPE 488nm laser	496	578
RPE 561nm laser	546	578

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 (NaN_3)
1% bovine serum albumin
5% sucrose

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 10µl of the suggested working dilution to 1x10^6 cells in 100µl
References	1. Sbrana, S. *et al.* (2014) Phenotype Changes of Circulating Monocytes in a Hypercholesterolemic Swine Model of Coronary Artery Disease J Cytol Histol 5:270 2. Domínguez, J. *et al.* (2001) Workshop studies on monoclonal antibodies in the myeloid panel with CD11 specificity. Vet Immunol Immunopathol. 80 (1-2): 111-9. 3. Sánchez-Torres C *et al.* (2003) Expression of porcine CD163 on monocytes/macrophages correlates with permissiveness to African swine fever infection. Arch Virol. 148 (12): 2307-23. 4. Van de Walle, G.R. *et al.* (2003) Transmission of pseudorabies virus from immune-masked blood monocytes to endothelial cells. J Gen Virol. 84 (Pt 3): 629-37. 5. Alvarez, B. *et al*. (2000) Molecular and functional characterization of porcine LFA-1 using monoclonal antibodies to CD11a and CD18. Xenotransplantation 7: 258-266 6. Sánchez, C. *et al.* (1999) The porcine 2A10 antigen is homologous to human CD163 and related to macrophage differentiation. J Immunol. 162: 5230-7 7. Thorgersen, E.B. *et al.* (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 8. Thorgersen, E.B. *et al.* (2010) CD14 inhibition efficiently attenuates early inflammatory and hemostatic responses in *Escherichia coli* sepsis in pigs. FASEB J. 24: 712-22 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.
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	Store at +4°C. DO NOT FREEZE. This product should be stored undiluted. 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 #20487 available at: https://www.bio-rad-antibodies.com/SDS/MCA2309PE 20487
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:RPE (MCA928PE)

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