

Datasheet: MCA2316A647

Description:	MOUSE ANTI PIG CD169:Alexa Fluor® 647
Specificity:	CD169
Other names:	SIALOADHESIN
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	3B11/11
Isotype:	IgG1
Quantity:	100 TESTS/1ml

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 Alexa Fluor® 647 - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	Alexa Fluor®647	650	665
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		
Approx. Protein Concentrations	IgG concentration 0.05 mg/ml		

Immunogen	Porcine alveolar macrophages.
External Database Links	<p>UniProt: A7LCJ3 Related reagents</p> <p>Entrez Gene: 397623 SIGLEC-1 Related reagents</p>
Synonyms	SA, SN
Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells of the mouse X63-Ag.8.653 myeloma cell line.
Specificity	<p>Mouse anti Pig CD169, clone 3B11/11 recognizes porcine CD169, also known as sialoadhesin or Siglec-1, a member of the sialic acid binding immunoglobulin-like lectin (Siglec) family. CD169 was originally identified in mice and identified as the sialic acid dependent Sheep erythrocyte receptor (Crocker et al.1986). CD169 has subsequently been identified in rat (van den Berg et al. 1992), human (Mucklow et al. 1995) and pig (Vanderheijden et al. 2003) .</p> <p>Mouse anti Porcine CD169, clone 3B1/11 was originally raised as part of a panel of anti porcine macrophage monoclonal antibodies raised against isolated porcine alveolar macrophages (Bullido et al. 1997). Immunohistochemical analysis indicated restriction to macrophage populations mainly in the spleen, lymph nodes, liver and Peyer's patches.</p> <p>Originally described as a non phagocytic intercellular adhesion receptor, work on porcine CD169 indicated that it may play a role as a viral adhesion receptor (Delputte et al. 2006) and as a targeted receptor for the delivery of toxins and antigens (Delputte et al. 2011) .</p> <p>Mouse anti pig CD169, clone 3B11/11 detects a band of approximately 190 kDa in alveolar macrophage extracts under non-reducing conditions (Revilla et al 2009).</p>
Flow Cytometry	Use 10µl of the suggested working dilution to 1x10 ⁶ cells in 100µl
References	<ol style="list-style-type: none"> 1. Thacker, E. <i>et al.</i> (2001) Summary of workshop findings for porcine myelomonocytic markers. Vet Immunol Immunopathol. 80 (1-2): 93-109. 2. Perdiguero, B. & Blasco, R. (2006) Interaction between vaccinia virus extracellular virus envelope A33 and B5 glycoproteins. J Virol. 80 (17): 8763-77. 3. Perdiguero, B. <i>et al.</i> (2008) Vaccinia virus A34 glycoprotein determines the protein composition of the extracellular virus envelope. J Virol. 82 (5): 2150-60. 4. Revilla, C. <i>et al.</i> (2009) Targeting to porcine sialoadhesin receptor improves antigen presentation to T cells. Vet Res. 40 (3): 14. 5. Ezquerria, A. <i>et al.</i> (2009) Porcine myelomonocytic markers and cell populations. Dev Comp Immunol. 33 (3): 284-98. 6. Prather, R.S. <i>et al.</i> (2013) An Intact Sialoadhesin (Sn/SIGLEC1/CD169) Is Not Required for Attachment/Internalization of the Porcine Reproductive and Respiratory Syndrome Virus. J Virol. 87: 9538-46.

7. Costa-Hurtado, M. *et al.* (2013) Changes in macrophage phenotype after infection of pigs with *Haemophilus parasuis* strains with different levels of virulence. [Infect Immun. 81 \(7\): 2327-33.](#)
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12. Wells, K.D. *et al.* (2017) Replacement of Porcine CD163 Scavenger Receptor Cysteine-Rich Domain 5 with a CD163-Like Homolog Confers Resistance of Pigs to Genotype 1 but Not Genotype 2 Porcine Reproductive and Respiratory Syndrome Virus. [J Virol. 91 \(2\): pii: e01521-16.](#)
13. Chen, J. *et al.* (2019) Generation of Pigs Resistant to Highly Pathogenic-Porcine Reproductive and Respiratory Syndrome Virus through Gene Editing of CD163. [Int J Biol Sci. 15 \(2\): 481-492.](#)
14. Li, P. *et al.* (2020) Susceptibility of porcine pulmonary microvascular endothelial cells to porcine reproductive and respiratory syndrome virus. [J Vet Med Sci. 82 \(9\): 1404-9.](#)
15. Álvarez, B. *et al.* (2023) Porcine Macrophage Markers and Populations: An Update. [Cells. 12 \(16\) :2103.](#)
16. Durazo-Martinez, K. *et al.* (2024) Porcine peritoneal macrophages are susceptible to porcine reproductive and respiratory syndrome virus infection. [Front Microbiol. 15: 1505900.](#)

Further Reading	1. Piriou-Guzylack, L. (2008) Membrane markers of the immune cells in swine: an update. Vet Res. 39: 54.
Storage	<p>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.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.</p>
Guarantee	12 months from date of despatch
Acknowledgements	<p>This product is provided under an intellectual property licence from Life Technologies Corporation. The transfer of this product is contingent on the buyer using the purchased product solely in research, excluding contract research or any fee for service research, and the buyer must not sell or otherwise transfer this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; (c) manufacturing or quality assurance or quality control, or (d) resale, whether or not resold for use in</p>

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Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA2316A647 10041
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Regulatory	For research purposes only
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Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA928A647\)](#)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M414439:221207'

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