

Datasheet: MCA2316A647

**BATCH NUMBER 152567**

<b>Description:</b>	MOUSE ANTI PIG CD169:Alexa Fluor® 647
<b>Specificity:</b>	CD169
<b>Other names:</b>	SIALOADHESIN
<b>Format:</b>	ALEXA FLUOR® 647
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	3B11/11
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat - 1/10

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

<b>Target Species</b>	Pig		
<b>Product Form</b>	Purified IgG conjugated to Alexa Fluor 647 - liquid		
<b>Max Ex/Em</b>	<b>Fluorophore</b>	<b>Excitation Max (nm)</b>	<b>Emission Max (nm)</b>
	Alexa Fluor®647	650	665
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant		
<b>Buffer Solution</b>	Phosphate buffered saline		
<b>Preservative</b>	0.09% Sodium Azide (NaN <sub>3</sub> )		
<b>Stabilisers</b>	1% Bovine Serum Albumin		
<b>Approx. Protein Concentrations</b>	IgG concentration 0.05 mg/ml		

<b>Immunogen</b>	Porcine alveolar macrophages.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">A7LCJ3</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">397623</a>    SIGLEC-1    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	SA, SN
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the mouse X63-Ag.8.653 myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Pig CD169, clone 3B11/11</b> 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 (<a href="#">Crocker et al.1986</a>). CD169 has subsequently been identified in rat (<a href="#">van den Berg et al. 1992</a>), human (<a href="#">Mucklow et al. 1995</a>) and pig (<a href="#">Vanderheijden et al. 2003</a>) .</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 (<a href="#">Bullido et al. 1997</a>). 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 (<a href="#">Delputte et al. 2006</a>) and as a targeted receptor for the delivery of toxins and antigens (<a href="#">Delputte et al. 2011</a>) .</p> <p>Mouse anti pig CD169, clone 3B11/11 detects a band of approximately 190 kDa in alveolar macrophage extracts under non-reducing conditions (<a href="#">Revilla et al 2009</a>).</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to 1x10 <sup>6</sup> cells in 100ul.
<b>References</b>	<ol style="list-style-type: none"> <li>1. Thacker, E. <i>et al.</i> (2001) Summary of workshop findings for porcine myelomonocytic markers. <a href="#">Vet Immunol Immunopathol. 80 (1-2): 93-109.</a></li> <li>2. 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. <a href="#">J Virol. 87: 9538-46.</a></li> <li>3. Revilla, C. <i>et al.</i> (2009) Targeting to porcine sialoadhesin receptor improves antigen presentation to T cells. <a href="#">Vet Res. 40 (3): 14.</a></li> <li>4. Rodríguez-Gómez IM <i>et al.</i> (2015) PRRSV-infected monocyte-derived dendritic cells express high levels of SLA-DR and CD80/86 but do not stimulate PRRSV-naïve regulatory T cells to proliferate. <a href="#">Vet Res. 46: 54.</a></li> <li>5. Costa-Hurtado, M. <i>et al.</i> (2013) Changes in macrophage phenotype after infection of pigs with <i>Haemophilus parasuis</i> strains with different levels of virulence. <a href="#">Infect Immun. 81 (7): 2327-33.</a></li> </ol>

6. Perdiguero, B. *et al.* (2008) Vaccinia virus A34 glycoprotein determines the protein composition of the extracellular virus envelope. [J Virol. 82 \(5\): 2150-60.](#)
7. Perdiguero, B. & Blasco, R. (2006) Interaction between vaccinia virus extracellular virus envelope A33 and B5 glycoproteins. [J Virol. 80 \(17\): 8763-77.](#)
8. Burkard, C. *et al.* (2017) Precision engineering for PRRSV resistance in pigs: Macrophages from genome edited pigs lacking CD163 SRCR5 domain are fully resistant to both PRRSV genotypes while maintaining biological function. [PLoS Pathog. 13 \(2\): e1006206.](#)
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11. Ezquerro, A. *et al.* (2009) Porcine myelomonocytic markers and cell populations. [Dev Comp Immunol. 33 \(3\): 284-98.](#)
12. Singleton, H. *et al.* (2016) Establishing Porcine Monocyte-Derived Macrophage and Dendritic Cell Systems for Studying the Interaction with PRRSV-1. [Front Microbiol. 7: 832.](#)
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.](#)

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**Further Reading** 1. Piriou-Guzylack, L. (2008) Membrane markers of the immune cells in swine: an update. [Vet Res. 39: 54.](#)

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**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.

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**Guarantee** 12 months from date of despatch

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**Health And Safety** Material Safety Datasheet documentation #10041 available at:

**Information** <https://www.bio-rad-antibodies.com/SDS/MCA2316A647>  
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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 \(MCA928A647\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 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 Fax: +44 (0)1865 852 739 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 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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