

## Datasheet: MCA1223A647

<b>Description:</b>	MOUSE ANTI PIG wCD8 ALPHA:Alexa Fluor® 647
<b>Specificity:</b>	CD8 ALPHA
<b>Other names:</b>	CD8
<b>Format:</b>	ALEXA FLUOR® 647
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	MIL12
<b>Isotype:</b>	IgG2a
<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 - 1/5

Where this antibody 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 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 Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> )		
	1% Bovine Serum Albumin		
<b>Approx. Protein Concentrations</b>	IgG concentration 0.05 mg/ml		

<b>Immunogen</b>	Porcine mesenteric lymphocytes.
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the P3 - X63 - Ag.653 myeloma cell line.
<b>Specificity</b>	<b>Mouse anti Pig wCD8 alpha antibody, clone MIL12</b> recognizes an epitope on the alpha chain of porcine wCD8. Clone MIL12 was clustered at the Third International Swine CD Workshop ( <a href="#">Haverson et al. 2001</a> ). Mouse anti Pig wCD8 alpha antibody, clone MIL12 was determined to bind to the CD8a epitope on the alpha chain based on its staining pattern on T lymphocytes and on its ability to block binding of the previously characterized CD8a antibody clone 76-2-11 to T lymphocytes ( <a href="#">Saalmuller et al.2001</a> ).
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
<b>References</b>	<ol style="list-style-type: none"> <li>Sarradell, J. <i>et al.</i> (2003) A morphologic and immunohistochemical study of the bronchus-associated lymphoid tissue of pigs naturally infected with <i>Mycoplasma hyopneumoniae</i>. <a href="#">Vet Pathol. 40: 395-404.</a></li> <li>Kick, A.R. <i>et al.</i> (2011) Evaluation of peripheral lymphocytes after weaning and vaccination for <i>Mycoplasma hyopneumoniae</i>. <a href="#">Res Vet Sci. 91 (3): e68-72.</a></li> <li>Tambuyzer, B.R. <i>et al.</i> (2012) Osteopontin alters the functional profile of porcine microglia <i>in vitro</i>. <a href="#">Cell Biol Int. 36 (12): 1233-8.</a></li> <li>Cao, D. <i>et al.</i> (2010) Synthetic innate defence regulator peptide enhances <i>in vivo</i> immunostimulatory effects of CpG-ODN in newborn piglets. <a href="#">Vaccine. 28: 6006-13.</a></li> <li>Clapperton, M. <i>et al.</i> (2005) Innate immune traits differ between Meishan and Large White pigs. <a href="#">Vet Immunol Immunopathol. 104: 131-44.</a></li> <li>Goujon, J.M. <i>et al.</i> (2000) Influence of cold-storage conditions on renal function of autotransplanted large pig kidneys. <a href="#">Kidney Int. 58: 838-50.</a></li> <li>Hauet, T. <i>et al.</i> (2002) Polyethylene glycol reduces the inflammatory injury due to cold ischemia/reperfusion in autotransplanted pig kidneys. <a href="#">Kidney Int. 62: 654-67.</a></li> <li>Piva, A. <i>et al.</i> (2005) Activated carbon does not prevent the toxicity of culture material containing fumonisin B1 when fed to weanling piglets. <a href="#">J Anim Sci. 83 (8): 1939-47.</a></li> <li>Kick, A.R. <i>et al.</i> (2012) Effects of stress associated with weaning on the adaptive immune system in pigs. <a href="#">J Anim Sci. 90: 649-56.</a></li> <li>Shi, K. <i>et al.</i> (2008) Changes in peripheral blood leukocyte subpopulations in piglets co-infected experimentally with porcine reproductive and respiratory syndrome virus and porcine circovirus type 2. <a href="#">Vet Microbiol. 129: 367-77.</a></li> <li>Spreeuwenberg, M.A. <i>et al.</i> (2001) Small intestine epithelial barrier function is compromised in pigs with low feed intake at weaning. <a href="#">J Nutr. 131: 1520-7.</a></li> <li>Clapperton, M. <i>et al.</i> (2008) Pig peripheral blood mononuclear leucocyte subsets are heritable and genetically correlated with performance. <a href="#">Animal. 2: 1575-84.</a></li> <li>Leifer, I. <i>et al.</i> (2012) Characterization of C-strain "Riems" TAV-epitope escape variants obtained through selective antibody pressure in cell culture. <a href="#">Vet Res. 43: 33.</a></li> <li>Tuchscherer, M. <i>et al.</i> (2012) Effects of inadequate maternal dietary protein:carbohydrate ratios during pregnancy on offspring immunity in pigs. <a href="#">BMC Vet Res. 8: 232.</a></li> <li>Lu, X. <i>et al.</i> (2012) Genome-wide association study for T lymphocyte subpopulations in swine. <a href="#">BMC Genomics. 13: 488.</a></li> <li>Swamy, H.V. <i>et al.</i> (2003) Effects of feeding a blend of grains naturally contaminated</li> </ol>

- with *Fusarium* mycotoxins on growth and immunological measurements of starter pigs, and the efficacy of a polymeric glucomannan mycotoxin adsorbent. [J Anim Sci. 81: 2792-803.](#)
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29. Nielsen, O.L. *et al.* (2021) A porcine model of subcutaneous *Staphylococcus aureus*. infection: a pilot study. [APMIS. Mar 01 \[Epub ahead of print\].](#)

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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 Information** Material Safety Datasheet documentation #10041 available at: 10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

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**Regulatory** For research purposes only

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## Related Products

### Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA929A647\)](#)

<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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