

# Datasheet: MCA1223GA

**BATCH NUMBER 159634**

<b>Description:</b>	MOUSE ANTI PIG wCD8 ALPHA
<b>Specificity:</b>	CD8 ALPHA
<b>Other names:</b>	CD8
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	MIL12
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/25 - 1/200
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	

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.

<b>Target Species</b>	Pig
<b>Product Form</b>	Purified IgG - liquid
<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> )

Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Porcine mesenteric lymphocytes.
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the P3 - X63 - Ag.653 myeloma cell line.
Specificity	<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> ).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
References	<ol style="list-style-type: none"> <li>1. 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>2. 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>3. 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>4. 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>5. 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>6. 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>7. 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>8. 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>9. 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>10. 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>11. 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>12. 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>13. 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>14. Tuchscherer, M. <i>et al.</i> (2012) Effects of inadequate maternal dietary</li> </ol>

- protein:carbohydrate ratios during pregnancy on offspring immunity in pigs. [BMC Vet Res. 8: 232.](#)
15. Lu, X. *et al.* (2012) Genome-wide association study for T lymphocyte subpopulations in swine. [BMC Genomics. 13: 488.](#)
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  17. Monroy-Salazar, H.G. *et al.* (2012) Effects of a live yeast dietary supplement on fecal coliform counts and on peripheral blood CD4+ and CD8+ lymphocyte subpopulations in nursery pigs. [J Swine Health Prod. 20: 276–282.](#)
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  28. Fogle, J.E. *et al.* (2019) Antibiotic Therapy Does Not Alter the Humoral Response to Vaccination for Porcine Circovirus 2 in Weaned Pigs. [Vet Sci. 6 \(2\)May 30 \[Epub ahead of print\].](#)
  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.

<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1223GA10040">https://www.bio-rad-antibodies.com/SDS/MCA1223GA10040</a>
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (H/L) (STAR117...)	<a href="#">Alk. Phos.</a> , <a href="#">DyLight®488</a> , <a href="#">DyLight®550</a> , <a href="#">DyLight®650</a> , <a href="#">DyLight®680</a> , <a href="#">DyLight®800</a> , <a href="#">FITC</a> , <a href="#">HRP</a>
Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>

### Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL \(MCA929\)](#)

<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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