

# Datasheet: MCA1223GA BATCH NUMBER 1609

| Description:  | MOUSE ANTI PIG wCD8 ALPHA |
|---------------|---------------------------|
| Specificity:  | CD8 ALPHA                 |
| Other names:  | CD8                       |
| Format:       | Purified                  |
| Product Type: | Monoclonal Antibody       |
| Clone:        | MIL12                     |
| Isotype:      | lgG2a                     |
| Quantity:     | 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 <u>www.bio-rad-antibodies.com/protocols</u>.

|                 |   | Yes                      | No                   | Not Determined          | Suggested Dilution        |
|-----------------|---|--------------------------|----------------------|-------------------------|---------------------------|
|                 | Flow Cytometry  |                          |                      |                         | 1/25 - 1/200              |
|                 | Immunohistology - Frozen  |                          |                      |                         |                           |
|                 | Immunohistology - Paraffin  |                          |                      | •                       |                           |
|                 | ELISA   |                          |                      | •                       |                           |
|                 | Immunoprecipitation   |                          |                      | •                       |                           |
|                 | Western Blotting  |                          |                      | •                       |                           |
|                 | Where this product has n  | use in a particular tecl | nnique this does not |                         |                           |
|                 | necessarily exclude its us  | se in sucl               | h procedu            | res. Suggested workir   | ng dilutions are given as |
|                 | a guide only. It is recomm  | nended th                | hat the us           | er titrates the product | for use in their own      |
|                 | system using appropriate  | negative                 | e/positive           | controls.               |                           |
| Target Species  | Pig   |                          |                      |                         |                           |
| Product Form    | Purified IgG - liquid   |                          |                      |                         |                           |
| Preparation     | Purified IgG prepared by affinity chromatography on Protein A supernatant |                          |                      | raphy on Protein A fro  | m tissue culture          |
| Buffer Solution | Phosphate buffered salin  | e                        |                      |                         |                           |
|                 |   |                          |                      |                         |                           |

| Carrier Free                      | Yes   |
|-----------------------------------|---|
| Approx. Protein<br>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 MII12 was clustered at the Third International Swine CD Workshop (Haverson <i>et al.</i> 2001). 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 ( <u>Saalmuller <i>et al.</i>2001</u> ).   |
| Flow Cytometry                    | Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.   |
| References                        | <ol> <li>Sarradell, J. <i>et al.</i> (2003) A morphologic and immunohistochemical study of the bronchus-associated lymphoid tissue of pigs naturally infected with Mycoplasma hyopneumoniae. <u>Vet Pathol. 40: 395-404.</u></li> <li>Kick, A.R. <i>et al.</i> (2011) Evaluation of peripheral lymphocytes after weaning and vaccination for <i>Mycoplasma hyopneumoniae</i>. <u>Res Vet Sci. 91 (3): e68-72.</u></li> <li>Tambuyzer, B.R. <i>et al.</i> (2012) Osteopontin alters the functional profile of porcine microglia <i>in vitro</i>. <u>Cell Biol Int. 36 (12): 1233-8.</u></li> <li>Cao, D. <i>et al.</i> (2010) Synthetic innate defence regulator peptide enhances in vivo immunostimulatory effects of CpG-ODN in newborn piglets. <u>Vaccine. 28: 6006-13.</u></li> <li>Clapperton, M. <i>et al.</i> (2005) Innate immune traits differ between Meishan and Large White pigs. <u>Vet Immunol Immunopathol. 104: 131-44.</u></li> <li>Goujon, J.M. <i>et al.</i> (2000) Influence of cold-storage conditions on renal function of autotransplanted large pig kidneys. <u>Kidney Int. 58: 838-50.</u></li> <li>Hauet, T. <i>et al.</i> (2002) Polyethylene glycol reduces the inflammatory injury due to cold ischemia/reperfusion in autotransplanted pig kidneys. <u>Kidney Int. 62: 654-67.</u></li> <li>Piva, A. <i>et al.</i> (2012) Effects of stress associated with weaning on the adaptive immune system in pigs. <u>JAnim Sci. 90: 649-56.</u></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. <u>Vet Microbiol. 129: 367-77.</u></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. <u>J Nutr. 131: 1520-7.</u></li> <li>Clapperton, M. <i>et al.</i> (2008) Pig peripheral blood mononuclear leucocyte subsets are heritable and genetically correlated with performance. <u>Animal. 2: 1575-84.</u></li> <li>Leifer, I. <i>et al.</i> (2012) Characterization of C-strain "Riems" TAV-epitope escape</li></ol> |

protein:carbohydrate ratios during pregnancy on offspring immunity in pigs. <u>BMC Vet Res.</u> 8: 232.

| 15. Lu, X. et al. (2012) Genome-wide | e association study for T lymphocyte subpopulations |
|--------------------------------------|---|
| in swine. BMC Genomics. 13: 488.     |   |

16. Swamy, H.V. *et al.* (2003) Effects of feeding a blend of grains naturally contaminated with Fusarium mycotoxins on growth and immunological measurements of starter pigs, and the efficacy of a polymeric glucomannan mycotoxin adsorbent. <u>J Anim Sci. 81:</u> <u>2792-803.</u>

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. <u>J Swine Health Prod. 20: 276–282.</u>

18. Ostrowska, E. *et al.* (2004) Effects of dietary conjugated linoleic acid on haematological and humoral responses in the grower pig. <u>Australian Journal of Agricultural Research 55: 711–718</u>

19. Carter, D.B. *et al.* (2002) Phenotyping of transgenic cloned piglets. <u>Cloning Stem</u> <u>Cells. 4: 131-45.</u>

20. Stenfeldt, C. *et al.* (2014) Morphologic and phenotypic characteristics of myocarditis in two pigs infected by foot-and mouth disease virus strains of serotypes O or A. <u>Acta Vet</u> <u>Scand. 56: 42.</u>

21. Zeigler, B.M. *et al.* (2015) The development and validation of methods for evaluating the immune system in preweaning piglets. <u>Food Chem Toxicol. 84: 197-207.</u>

22. Pasternak, J. A. (2014) Grouping Pig-Specific Responses to Mitogen with Similar Responder Animals may Facilitate the Interpretation of Results Obtained in an Out-Bred Animal Model Journal of Vaccines & Vaccination. 05 (05).

23. Marinaro M *et al.* (2015) Changes in peripheral blood leucocytes of sheep experimentally infected with *Mycoplasma agalactiae*. <u>Vet Microbiol. 175 (2-4): 257-64.</u>

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25. Hemmink, J.D. *et al.* (2016) Distinct immune responses and virus shedding in pigs following aerosol, intra-nasal and contact infection with pandemic swine influenza A virus, A(H1N1)09. <u>Vet Res. 47 (1): 103.</u>

26. López, E. *et al.* (2019) Identification of very early inflammatory markers in a porcine myocardial infarction model. <u>BMC Vet Res. 15 (1): 91.</u>

27. Hu, Z. *et al.* (2019) Genomic variant in porcine TNFRSF1A gene and its effects on TNF signaling pathway *in vitro*. <u>Gene. 700: 105-9.</u>

28. Fogle, J.E. *et al.* (2019) Antibiotic Therapy Does Not Alter the Humoral Response to Vaccination for Porcine Circovirus 2 in Weaned Pigs. <u>Vet Sci. 6 (2)May 30 [Epub ahead of print]</u>.

 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 or at -20°C if preferred.

This product should be stored undiluted.

|                                  | Storage in frost-free freezers is not recommended. 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<br>Information | Material Safety Datasheet documentation #10040 available at:<br>https://www.bio-rad-antibodies.com/SDS/MCA1223GA<br>10040  |
| Regulatory                       | For research purposes only   |

# **Related Products**

#### **Recommended Secondary Antibodies**

| Rabbit Anti Mouse IgG (STAR12)                  | RPE  |  |  |
|---|--|--|--|
| Goat Anti Mouse IgG IgA IgM (STAR87) <u>HRP</u> |  |  |  |
| Goat Anti Mouse IgG (STAR76)                    | RPE  |  |  |
| Goat Anti Mouse IgG (STAR70)                    | <u>FITC</u>                                  |  |  |
| Goat Anti Mouse IgG (H/L) (STAR117)             | <u>Alk. Phos., DyLight®488, DyLight®550,</u> |  |  |
|   | DyLight®650, DyLight®680, DyLight®800,       |  |  |
|   | <u>FITC, HRP</u>                             |  |  |
| Goat Anti Mouse IgG (STAR77)                    | HRP  |  |  |
| Goat Anti Mouse IgG (Fc) (STAR120)              | FITC, HRP                                    |  |  |
| Rabbit Anti Mouse IgG (STAR13)                  | HRP  |  |  |
| Rabbit Anti Mouse IgG (STAR9)                   | <u>FITC</u>                                  |  |  |
| <b>Recommended Negative Controls</b>            |  |  |  |

MOUSE IgG2a NEGATIVE CONTROL (MCA929)

| North & South | Tel: +1 800 265 7376           | Worldwide | Tel: +44 (0)1865 852 700       | Europe | Tel: +49 (0) 89 8090 95 21           |
|---------------|--------------------------------|-----------|--------------------------------|--------|--------------------------------------|
| America       | Fax: +1 919 878 3751           |           | Fax: +44 (0)1865 852 739       |        | Fax: +49 (0) 89 8090 95 50           |
|               | Email: antibody_sales_us@bio-r | ad.com    | Email: antibody_sales_uk@bio-r | ad.com | Email: antibody_sales_de@bio-rad.com |

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M364958:200529'

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