

Datasheet: MCA1223GA

BATCH NUMBER 159634

Description:	MOUSE ANTI PIG wCD8 ALPHA
Specificity:	CD8 ALPHA
Other names:	CD8
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	MIL12
Isotype:	IgG2a
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 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.

Target Species	Pig
Product Form	Purified IgG - liquid
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)

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	Mouse anti Pig wCD8 alpha antibody, clone MIL12 recognizes an epitope on the alpha chain of porcine wCD8. Clone MIL12 was clustered at the Third International Swine CD Workshop (Haverson et al. 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 (Saalmuller et al.2001).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	<ol style="list-style-type: none"> 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>. Vet Pathol. 40: 395-404. 2. Kick, A.R. <i>et al.</i> (2011) Evaluation of peripheral lymphocytes after weaning and vaccination for <i>Mycoplasma hyopneumoniae</i>. Res Vet Sci. 91 (3): e68-72. 3. Tambuyzer, B.R. <i>et al.</i> (2012) Osteopontin alters the functional profile of porcine microglia <i>in vitro</i>. Cell Biol Int. 36 (12): 1233-8. 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. Vaccine. 28: 6006-13. 5. Clapperton, M. <i>et al.</i> (2005) Innate immune traits differ between Meishan and Large White pigs. Vet Immunol Immunopathol. 104: 131-44. 6. Goujon, J.M. <i>et al.</i> (2000) Influence of cold-storage conditions on renal function of autotransplanted large pig kidneys. Kidney Int. 58: 838-50. 7. Hauet, T. <i>et al.</i> (2002) Polyethylene glycol reduces the inflammatory injury due to cold ischemia/reperfusion in autotransplanted pig kidneys. Kidney Int. 62: 654-67. 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. J Anim Sci. 83 (8): 1939-47. 9. Kick, A.R. <i>et al.</i> (2012) Effects of stress associated with weaning on the adaptive immune system in pigs. J Anim Sci. 90: 649-56. 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. Vet Microbiol. 129: 367-77. 11. Spreeuwenberg, M.A. <i>et al.</i> (2001) Small intestine epithelial barrier function is compromised in pigs with low feed intake at weaning. J Nutr. 131: 1520-7. 12. Clapperton, M. <i>et al.</i> (2008) Pig peripheral blood mononuclear leucocyte subsets are heritable and genetically correlated with performance. Animal. 2: 1575-84. 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. Vet Res. 43: 33. 14. Tuchscherer, M. <i>et al.</i> (2012) Effects of inadequate maternal dietary

- 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.](#)
 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. [J Anim Sci. 81: 2792-803.](#)
 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.](#)
 18. Ostrowska, E. *et al.* (2004) Effects of dietary conjugated linoleic acid on haematological and humoral responses in the grower pig. [Australian Journal of Agricultural Research 55: 711–718](#)
 19. Carter, D.B. *et al.* (2002) Phenotyping of transgenic cloned piglets. [Cloning Stem Cells. 4: 131-45.](#)
 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. [Acta Vet Scand. 56: 42.](#)
 21. Zeigler, B.M. *et al.* (2015) The development and validation of methods for evaluating the immune system in preweaning piglets. [Food Chem Toxicol. 84: 197-207.](#)
 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*. [Vet Microbiol. 175 \(2-4\): 257-64.](#)
 24. Liermann, W. *et al.* (2016) Effects of two commercial diets and technical feed treatment on stomach lesions and immune system of fattening pigs. [J Anim Physiol Anim Nutr \(Berl\). Nov 2. \[Epub ahead of print\]](#)
 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. [Vet Res. 47 \(1\): 103.](#)
 26. López, E. *et al.* (2019) Identification of very early inflammatory markers in a porcine myocardial infarction model. [BMC Vet Res. 15 \(1\): 91.](#)
 27. Hu, Z. *et al.* (2019) Genomic variant in porcine TNFRSF1A gene and its effects on TNF signaling pathway *in vitro*. [Gene. 700: 105-9.](#)
 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 \[Epub ahead of print\].](#)
 30. Maciag, S.S. *et al.* (2022) The influence of source of porcine colostrum in development of early immune ontogeny in the piglet [Ref Sq. Mar 24 \[Epub ahead of print\].](#)

Further Reading

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

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.

Guarantee	12 months from date of despatch
------------------	---------------------------------

Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA1223GA 10040
--------------------------------------	---

Regulatory	For research purposes only
-------------------	----------------------------

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight@488 , DyLight@550 , DyLight@650 , DyLight@680 , DyLight@800 , FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP

Recommended Negative Controls

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

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
----------------------------------	---	------------------	---	---------------	---

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M382930:210513'

Printed on 22 Sep 2023