

Datasheet: MCA1223F

Description:	MOUSE ANTI PIG wCD8 ALPHA:FITC
Specificity:	CD8 ALPHA
Other names:	CD8
Format:	FITC
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	▪			Neat

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 conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	FITC	490	525
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% sodium azide (NaN ₃)		
Stabilisers	1% bovine serum albumin		
Approx. Protein Concentrations	IgG concentration 0.1mg/ml		

Immunogen	Porcine mesenteric lymphocytes.
RRID	AB_323250
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 10µl of the suggested working dilution to label 10 ⁶ cells in 100µl.
References	<ol style="list-style-type: none"> 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. 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. Carter, D.B. <i>et al.</i> (2002) Phenotyping of transgenic cloned piglets. Cloning Stem Cells. 4: 131-45. 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. Swamy, H.V. <i>et al.</i> (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. 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. Vet Pathol. 40: 395-404. Ostrowska, E. <i>et al.</i> (2004) Effects of dietary conjugated linoleic acid on haematological and humoral responses in the grower pig Austral J Agric Res. 55 (7): 711. 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. Clapperton, M. <i>et al.</i> (2005) Innate immune traits differ between Meishan and Large White pigs. Vet Immunol Immunopathol. 104: 131-44. 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. Clapperton, M. <i>et al.</i> (2008) Pig peripheral blood mononuclear leucocyte subsets are heritable and genetically correlated with performance. Animal. 2: 1575-84. 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. Monroy-Salazar, H.G. <i>et al.</i> (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. Lu, X. <i>et al.</i> (2012) Genome-wide association study for T lymphocyte subpopulations

in swine. [BMC Genomics. 13: 488.](#)

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20. Alex, P.J. (2014) Grouping Pig-Specific Responses to Mitogen with Similar Responder Animals may Facilitate the Interpretation of Results Obtained in an Out-Bred Animal Model [J Vaccines & Vaccination. 05 \(05\)](#)

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24. López, E. *et al.* (2019) Identification of very early inflammatory markers in a porcine myocardial infarction model. [BMC Vet Res. 15 \(1\): 91.](#)

25. Hu, Z. *et al.* (2019) Genomic variant in porcine TNFRSF1A gene and its effects on TNF signaling pathway *in vitro*. [Gene. 700: 105-9.](#)

26. 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 \[Epub ahead of print\].](#)

27. Nielsen, O.L. *et al.* (2021) A porcine model of subcutaneous *Staphylococcus aureus* infection: a pilot study. [APMIS. Mar 01 \[Epub ahead of print\].](#)

28. 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 \[Epub ahead of print\].](#)

29. Wu, M.C. *et al.* (2023) A protein-based subunit vaccine with biological adjuvants provides effective protection against *Pasteurella multocida* in pigs. [Vet Res. 54 \(1\): 17.](#)

30. Bujňák, L. *et al.* (2023) The Effect of Dietary Humic Substances on Cellular Immunity and Blood Characteristics in Piglets [Agriculture. 13 \(3\): 636.](#)

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. This product is photosensitive and should be protected from light.

Guarantee	12 months from date of despatch
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Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA1223F 10041
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Regulatory	For research purposes only
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Related Products

Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL:FITC \(MCA929F\)](#)

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
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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M408578:221013'

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