

Datasheet: MCA2317GA

BATCH NUMBER 152888

Description:	MOUSE ANTI PIG MACROPHAGES
Specificity:	MACROPHAGES
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	BA4D5
Isotype:	IgG2b
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)	▪			1/50 - 1/100
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting (2)	▪			
Immunofluorescence	▪			

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

(1) Membrane permeabilization is required for this application. Bio-Rad recommends the use of Leucoperm (BUF09) for this purpose.

(2) BA4D5 recognizes a 105kDa antigen in pig macrophage lysates under non-reducing conditions.

Target Species	Pig
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G 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 alveolar macrophages.
Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells of the mouse SP2/0 mouse myeloma cell line.
Specificity	<p>Mouse anti Pig Macrophages antibody, clone BA4D5 recognizes porcine cells of the monocyte/macrophage lineage. Expression of the antigen is increased with maturation, with higher expression on peritoneal and alveolar macrophages.</p> <p>Some expression has also been observed on peripheral blood lymphocytes.</p> <p>The antigen recognized by clone BA4D5 has a broad tissue distribution and this antibody stains macrophages in a range of tissues, including the thymus, spleen periarteriolar lymphoid sheath (PALS), spleen red pulp and the Peyer's patches. Expression has also been reported on some non-hematopoietic cells including endothelial cells.</p> <p>It is believed that clone BA4D5 may be specific for porcine CD68 (Poulsen <i>et al.</i> 2016) although the protein recognized by this antibody has not yet been fully characterized. The protein is expressed on the cell surface, although it is most abundantly expressed in the cytoplasm.</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 1x10 ⁶ cells in 100ul.
References	<ol style="list-style-type: none"> Luechtenborg, B. <i>et al.</i> (2008) Function of scavenger receptor class A type I/II is not important for smooth muscle foam cell formation. Eur J Cell Biol. 87: 91-9. Fujita M <i>et al.</i> (2013) Technique of endoscopic biopsy of islet allografts transplanted into the gastric submucosal space in pigs. Cell Transplant. 22 (12): 2335-44. Muscari C <i>et al.</i> (2010) Comparison between Culture Conditions Improving Growth and Differentiation of Blood and Bone Marrow Cells Committed to the Endothelial Cell Lineage. Biol Proced Online. 12 (1): 9023. Liu, G. <i>et al.</i> (2015) Influenza A Virus Panhandle Structure is Directly Involved in RIG-I Activation and IFN Induction. J Virol. pii: JVI.00232-15. Ezquerro, A. <i>et al.</i> (2009) Porcine myelomonocytic markers and cell populations. Dev Comp Immunol. 33 (3): 284-98. Rayat, G.R. <i>et al.</i> (2016) First update of the International Xenotransplantation Association consensus statement on conditions for undertaking clinical trials of porcine islet products in type 1 diabetes - Chapter 3: Porcine islet product manufacturing and release testing criteria. Xenotransplantation. 23 (1): 38-45. Poulsen, C.B. <i>et al.</i> (2016) Treatment with a human recombinant monoclonal IgG antibody against oxidized LDL in atherosclerosis-prone pigs reduces cathepsin S in

coronary lesions. [Int J Cardiol. 215: 506-515.](#)

8. Sohn, E.H. *et al.* (2015) Allogenic iPSC-derived RPE cell transplants induce immune response in pigs: a pilot study. [Sci Rep. 5: 11791.](#)

9. Wang, L. *et al.* (2017) Porcine alveolar macrophage polarization is involved in inhibition of porcine reproductive and respiratory syndrome virus (PRRSV) replication. [J Vet Med Sci. Sep 17 \[Epub ahead of print\].](#)

10. Porras, A.M. *et al.* (2018) Creation of disease-inspired biomaterial environments to mimic pathological events in early calcific aortic valve disease. [Proc Natl Acad Sci U S A. 115 \(3\): E363-E371.](#)

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.
Storage in frost-free freezers is not recommended.
This product should be stored undiluted. 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 Information Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2317GA>
10040

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...) [RPE](#)
Goat Anti Mouse IgG IgA IgM (STAR87...) [HRP](#)
Goat Anti Mouse IgG (STAR76...) [RPE](#)
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](#)
Goat Anti Mouse IgG (STAR77...) [HRP](#)
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)

Recommended Negative Controls

[MOUSE IgG2b NEGATIVE CONTROL \(MCA691\)](#)

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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

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