

Datasheet: MCA1220GA

Description:	MOUSE ANTI PIG CD11R1
Specificity:	CD11R1
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	MIL4
Isotype:	IgG1
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
Species Cross Reactivity	<p>Reacts with: Human, Guinea Pig</p> <p>N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.</p>
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 mg/ml
Immunogen	Porcine Lamina Propria Leucocytes.
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the P3 - X63 - Ag.653 myeloma cell line.
Specificity	<p>Mouse anti Pig CD11R1, clone MIL4 recognizes the porcine cell surface antigen classified as CD11R1 at the Third International Workshop on Swine Leukocyte Differentiation Antigens (Haverson et al. 2001). Mouse anti Pig CD11R1, clone MIL4 stains porcine eosinophils, a subset of neutrophils and NK cells, it does not stain monocytes or macrophages (Haverson et al. 1994).</p> <p>Mouse anti Pig CD11R1, clone MIL4 immunoprecipitates a band corresponding to integrin β2 (CD18) of ~95kDa, in common with all other anti CD11 antibodies tested at the workshop and also a band of ~165 kDa corresponding to CD11R1, in a manner identical to the cross reactive anti human CD11b clone, TMG6-5 from peripheral blood mononuclear cell lysates suggesting that porcine CD11R1 is analogous to human CD11b (Dominguez et al. 2001)</p> <p>Mouse anti pig CD11R1, clone MIL4 is cross reactive with the guinea pig and is useful for the identification of a population of guinea pig natural killer cells, Kurloff cells (Takizawa et al. 2004) (Eremin et al. 1980).</p>
Flow Cytometry	Use 10µl of the suggested working dilution to label 1x10 ⁶ cells in 100µl
References	<ol style="list-style-type: none"> Haverson, K. <i>et al.</i> (1994) Characterization of monoclonal antibodies specific for monocytes, macrophages and granulocytes from porcine peripheral blood and mucosal tissues. J Immunol Methods. 170 (2): 233-45. Domínguez, J. <i>et al.</i> (2001) Workshop studies on monoclonal antibodies in the myeloid panel with CD11 specificity. Vet Immunol Immunopathol. 80 (1-2): 111-9. Inman, C.F. <i>et al.</i> (2010) Dendritic cells interact with CD4 T cells in intestinal mucosa. J Leukoc Biol. 88: 571-8. Cheng, Q. <i>et al.</i> (2010) Administered CpG oligodeoxynucleotide induces mRNA expression of CXC and CC chemokines at the intestinal mucosa and PBMCs in piglets. Int Immunopharmacol. 10: 611-8. Ordway, D. <i>et al.</i> (2007) The cellular immune response to <i>Mycobacterium tuberculosis</i> infection in the guinea pig. J Immunol. 179: 2532-41. Shang, S. <i>et al.</i> (2011) Activities of TMC207, rifampin, and pyrazinamide against <i>Mycobacterium tuberculosis</i> infection in guinea pigs. Antimicrob Agents Chemother. 55 (1): 124-31. Rank, R.G. <i>et al.</i> (2012) Effect of Inflammatory Response on In Vivo Competition

between Two Chlamydial Variants in the Guinea Pig Model of Inclusion Conjunctivitis.

[Infect Immun. 80: 612-9.](#)

8. Suda, Y. *et al.* (2014) Immunobiotic *Lactobacillus jensenii* as immune-health promoting factor to improve growth performance and productivity in post-weaning pigs. [BMC Immunol. 15: 24.](#)

9. Shegarfi, H. *et al.* (2015) Regulation of CCN1 (Cyr61) in a porcine model of intestinal ischemia/reperfusion. [Innate Immun. 21 \(5\): 453-62.](#)

10. Auray G *et al.* (2016) Characterization and Transcriptomic Analysis of Porcine Blood Conventional and Plasmacytoid Dendritic Cells Reveals Striking Species-Specific Differences. [J Immunol. Nov 11. pii: 1600672. \[Epub ahead of print\]](#)

11. Yeruva, L. *et al.* (2015) Chlamydial variants differ in ability to ascend the genital tract in the guinea pig model of chlamydial genital infection. [Infect Immun. 83 \(8\): 3176-83.](#)

12. Sautter, C.A. *et al.* (2018) Phenotypic and functional modulations of porcine macrophages by interferons and interleukin-4. [Dev Comp Immunol. 84: 181-92.](#)

13. Ferret-Bernard, S. *et al.* (2020) Maternal Supplementation of Food Ingredient (Prebiotic) or Food Contaminant (Mycotoxin) Influences Mucosal Immune System in Piglets. [Nutrients. 12 \(7\): 2115.](#)

14. Iida, H. *et al.* (2019) Paraimmunobiotic Bifidobacteria Modulate the Expression Patterns of Peptidoglycan Recognition Proteins in Porcine Intestinal Epitheliocytes and Antigen Presenting Cells. [Cells. 8\(8\):891.](#)

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/MCA1220GA>
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 (STAR70...)	FITC
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC

Goat Anti Mouse IgG (STAR76...)

[RPE](#)

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 (STAR13...)

[HRP](#)

Goat Anti Mouse IgG (Fc) (STAR120...)

[FITC](#), [HRP](#)

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

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

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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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