Datasheet: MCA2311GA

Description:	MOUSE ANTI PIG CD163
Specificity:	CD163
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	2A10/11
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	▪			1/50 - 1/200
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting (1)	▪			
Immunofluorescence	▪			
Functional Assays (2)			▪	

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)**Clone 2A10/11 recognizes porcine CD163 under non-reducing conditions.**

(2) **Removal of sodium azide is recommended prior to use in functional assays. Bio-Rad recommend the use of EQU003 for this purpose.**

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 alveolar macrophages.
External Database Links	**UniProt:** Q2VL90 Related reagents **Entrez Gene:** 397031 CD163 Related reagents
Synonyms	M130
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the X63-Ag.8.653 myeloma cell line.
Specificity	**Mouse anti Pig CD163 antibody, clone 2A10/11** recognises porcine CD163, a ~120 kDa single pass type 1 transmembrane cell surface glycoprotein expressed on cells of the monocyte/macrophage lineage. The expression levels of CD163 vary during the course of macrophage differentiation. The highest levels of CD163 expression are found on tissue macrophages but bone marrow derived cells are CD163 negative. Expression of CD163 on peripheral blood monocytes varies between about 5% and 50% depending on the donor (Sanchez *et al.* 1999). Mouse anti Pig CD163, clone 2A10/11 is reported to inhibit both African swine fever infection and viral particle binding to alveolar macrophages in a dose-dependent manner (Sanchez-Torres *et al.* 2003).
Flow Cytometry	Use 10ul of the suggested working dilution to $1x10^6$ cells in 100ul.
Western Blotting	Clone 2A10/11 detects a band of approximately 120kD in alveolar macrophage cell lysates under non-reducing conditions.
References	1. Yang, P. *et al.* (2002) Immune cells in the porcine retina: distribution, characterization and morphological features. Invest Ophthalmol Vis Sci. 43 (5): 1488-92. 2. Thacker, E. *et al.* (2001) Summary of workshop findings for porcine myelomonocytic markers. Vet Immunol Immunopathol. 80 (1-2): 93-109. 3. Sánchez-Torres, C. *et al.* (2003) Expression of porcine CD163 on monocytes/macrophages correlates with permissiveness to African swine fever infection. Arch Virol. 148 (12): 2307-23. 4. Gómez del Moral M *et al.* (1999) African swine fever virus infection induces tumor necrosis factor alpha production: implications in pathogenesis. J Virol. 73 (3): 2173-80. 5. De Baere, M.I. *et al.* (2012) Interaction of the European genotype porcine reproductive and respiratory syndrome virus (PRRSV) with sialoadhesin (CD169/Siglec-1) inhibits alveolar macrophage phagocytosis. Vet Res. 43: 47. 6. Prather, R.S. *et al.* (2013) An Intact Sialoadhesin (Sn/SIGLEC1/CD169) Is Not Required for Attachment/Internalization of the Porcine Reproductive and Respiratory Syndrome Virus. J Virol. 87: 9538-46. 7. Delrue, I. *et al.* (2010) Susceptible cell lines for the production of porcine reproductive and respiratory syndrome virus by stable transfection of sialoadhesin and CD163. BMC Biotechnol. 10: 48. 8. Katchman, H. *et al.* (2008) Embryonic porcine liver as a source for transplantation: advantage of intact liver implants over isolated hepatoblasts in overcoming homeostatic inhibition by the quiescent host liver. Stem Cells. 26: 1347-55. 9. Moreno, S.*et al.* (2010) Porcine monocyte subsets differ in the expression of CCR2 and in their responsiveness to CCL2. Vet Res. 41: 76.

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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.
Shelf Life	18 months from date of despatch.
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: 10040: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos., HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC, HRP
Rabbit Anti Mouse IgG (STAR8...)	DyLight®800
Goat Anti Mouse IgG (STAR70...)	FITC
Rabbit Anti Mouse IgG (STAR13...)	HRP
Human Anti Mouse IgG1 (HCA036...)	HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos., DyLight®488, DyLight®549, DyLight®649, DyLight®680, DyLight®800, FITC, HRP

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL (MCA928)

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Worldwide Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com

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