# Datasheet: MCA2311GA

**BATCH NUMBER 1806**

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| **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.**

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| **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 |

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| **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:**<br>Q2VL90 Related reagents<br><br>**Entrez Gene:**<br>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).<br><br>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.<br>2. Thacker, E. *et al.* (2001) Summary of workshop findings for porcine myelomonocytic markers. Vet Immunol Immunopathol. 80 (1-2): 93-109.<br>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.<br>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.<br>5. De Baere, M.I. *et al.* (2012) Interaction of the European genotype porcine reproductive |

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domestic swine. Vaccine. 34 (7): 914-22.
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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$^{o}$C or at -20$^{o}$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.

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| **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/MCA2311GA 10040 |
| **Regulatory** | For research purposes only |

# Related Products

## Recommended Secondary Antibodies

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| 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 |
| Goat Anti Mouse IgG (Fc) (STAR120...) | FITC, HRP |
| 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 |

## Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL (MCA928)


**North & South America** Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com

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**Printed on 12 Aug 2023**