

# Datasheet: MCA2311F

**BATCH NUMBER 163026**

|                      |                           |
|----------------------|---------------------------|
| <b>Description:</b>  | MOUSE ANTI PIG CD163:FITC |
| <b>Specificity:</b>  | CD163                     |
| <b>Format:</b>       | FITC                      |
| <b>Product Type:</b> | Monoclonal Antibody       |
| <b>Clone:</b>        | 2A10/11                   |
| <b>Isotype:</b>      | IgG1                      |
| <b>Quantity:</b>     | 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](http://www.bio-rad-antibodies.com/protocols).

|                | Yes | No | Not Determined | Suggested Dilution |
|----------------|-----|----|----------------|--------------------|
| Flow Cytometry | ▪   |    |                | Neat - 1/10        |

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.

|                                |                                                                                               |                      |                   |
|--------------------------------|-----------------------------------------------------------------------------------------------|----------------------|-------------------|
| 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 Stabilisers       | 0.09% Sodium Azide                                                                            |                      |                   |
|                                | 1%                                                                                            | Bovine Serum Albumin |                   |
| Approx. Protein Concentrations | IgG concentration 0.1 mg/ml                                                                   |                      |                   |

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Immunogen               | Porcine alveolar macrophages.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| External Database Links | <p><b>UniProt:</b><br/> <a href="#">Q2VL90</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b><br/> <a href="#">397031</a>    CD163    <a href="#">Related reagents</a></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Synonyms                | M130                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| RRID                    | AB_2074554                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Fusion Partners         | Spleen cells from immunised BALB/c mice were fused with cells of the X63-Ag.8.653 myeloma cell line.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Specificity             | <p><b>Mouse anti Pig CD163 antibody, clone 2A10/11</b> 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 (<a href="#">Sanchez et al. 1999</a>).</p> <p>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 (<a href="#">Sanchez-Torres et al. 2003</a>).</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Flow Cytometry          | Use 10ul of the suggested working dilution to 1x10 <sup>6</sup> cells in 100ul.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| References              | <ol style="list-style-type: none"> <li>1. Yang, P. <i>et al.</i> (2002) Immune cells in the porcine retina: distribution, characterization and morphological features. <a href="#">Invest Ophthalmol Vis Sci. 43 (5): 1488-92.</a></li> <li>2. Thacker, E. <i>et al.</i> (2001) Summary of workshop findings for porcine myelomonocytic markers. <a href="#">Vet Immunol Immunopathol. 80 (1-2): 93-109.</a></li> <li>3. Sánchez-Torres, C. <i>et al.</i> (2003) Expression of porcine CD163 on monocytes/macrophages correlates with permissiveness to African swine fever infection. <a href="#">Arch Virol. 148 (12): 2307-23.</a></li> <li>4. Gómez del Moral M <i>et al.</i> (1999) African swine fever virus infection induces tumor necrosis factor alpha production: implications in pathogenesis. <a href="#">J Virol. 73 (3): 2173-80.</a></li> <li>5. De Baere, M.I. <i>et al.</i> (2012) Interaction of the European genotype porcine reproductive and respiratory syndrome virus (PRRSV) with sialoadhesin (CD169/Siglec-1) inhibits alveolar macrophage phagocytosis. <a href="#">Vet Res. 43: 47.</a></li> <li>6. Prather, R.S. <i>et al.</i> (2013) An Intact Sialoadhesin (Sn/SIGLEC1/CD169) Is Not Required for Attachment/Internalization of the Porcine Reproductive and Respiratory Syndrome Virus. <a href="#">J Virol. 87: 9538-46.</a></li> <li>7. Delrue, I. <i>et al.</i> (2010) Susceptible cell lines for the production of porcine reproductive and respiratory syndrome virus by stable transfection of sialoadhesin and CD163. <a href="#">BMC Biotechnol. 10: 48.</a></li> </ol> |

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#### Further Reading

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#### 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.

|                                      |                                                                                                                                                                                        |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Guarantee</b>                     | 12 months from date of despatch                                                                                                                                                        |
| <b>Health And Safety Information</b> | Material Safety Datasheet documentation #10041 available at:<br><a href="https://www.bio-rad-antibodies.com/SDS/MCA2311F">https://www.bio-rad-antibodies.com/SDS/MCA2311F</a><br>10041 |
| <b>Regulatory</b>                    | For research purposes only                                                                                                                                                             |

## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:FITC \(MCA928F\)](#)

|                                  |                                                                                                                                         |                  |                                                                                                                                                 |               |                                                                                                                                                     |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
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