# Datasheet: MCA6112F

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| **Description:** | MOUSE ANTI PIG CD205:FITC |
| **Specificity:** | CD205 |
| **Format:** | FITC |
| **Product Type:** | Monoclonal Antibody |
| **Clone:** | ZH9F7 |
| **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 | ▪ | | | Neat - 1/5 |

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

**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 ($NaN_3$)
1% Bovine Serum Albumin

**Approx. Protein Concentrations**

IgG concentration 0.1 mg/ml

**Immunogen**

Pig CD205

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| **Specificity** | **Mouse anti Pig CD205, clone ZH9F7** recognizes the endocytic receptor CD205, also known as DEC205.<br><br>CD205 is expressed at high levels by dendritic cell (DC) subsets and can be detected on thymic epithelial cells (Flores-Mendoza *et al.* 2010). CD205 is also expressed on monocytes and can be detected at low levels on lymphocytes.<br><br>Mouse anti Pig CD205 antibody, clone ZH9F7, has been used in characterization of the species-conserved features of the cDC1 subset. This subset is characterized by high surface expression of CD205, CD135, CADM1, low levels of CD172a, a lack of CD115, XCR1, and BATF3; and restricted APN gene expression (Auray *et al.* 2016). CD205 receptor expression was confirmed in cDC1 and cDC2 subsets using flow cytometry on porcine tonsil, submaxillary and mesenteric lymph nodes, and spleen lymphoid tissues (Parra-Sanchez *et al.* 2018). |
| **Flow Cytometry** | Use 10ul of the suggested working dilution to label 1x$10^6$ cells in 100ul |
| **References** | 1. Auray, G. *et al.* (2016) Characterization and Transcriptomic Analysis of Porcine Blood Conventional and Plasmacytoid Dendritic Cells Reveals Striking Species-Specific Differences. J Immunol. 197 (12): 4791-806.<br>2. Parra-Sánchez, H. *et al.* (2018) Characterization and expression of DEC205 in the cDC1 and cDC2 subsets of porcine dendritic cells from spleen, tonsil, and submaxillary and mesenteric lymph nodes. Mol Immunol. 96: 1-7.<br>3. Bustamante-Córdova, L. *et al.* (2019) Evaluation of a Recombinant Mouse X Pig Chimeric Anti-Porcine DEC205 Antibody Fused with Structural and Nonstructural Peptides of PRRS Virus. Vaccines (Basel). 7 (2): 43.<br>4. Álvarez, B. *et al.* (2023) Porcine Macrophage Markers and Populations: An Update. Cells. 12 (16) :2103. |
| **Further Reading** | 1. Lilian, F. *et al.* (2010) Characterization of porcine CD205 Developmental & Comparative Immunology. 34 (7): 715-721. |
| **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.<br><br>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 #10041 available at:<br>https://www.bio-rad-antibodies.com/SDS/MCA6112F<br>10041 |
| **Regulatory** | For research purposes only |

# Related Products

## Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:FITC (MCA928F)


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| **North & South America** | Tel: +1 800 265 7376<br>Fax: +1 919 878 3751<br>Email: antibody_sales_us@bio-rad.com | **Worldwide** | Tel: +44 (0)1865 852 700<br>Fax: +44 (0)1865 852 739<br>Email: antibody_sales_uk@bio-rad.com | **Europe** | Tel: +49 (0) 89 8090 95 21<br>Fax: +49 (0) 89 8090 95 50<br>Email: antibody_sales_de@bio-rad.com |


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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