

Datasheet: MCA5974F

**BATCH NUMBER 163393**

|                      |                          |
|----------------------|--------------------------|
| <b>Description:</b>  | MOUSE ANTI PIG CD52:FITC |
| <b>Specificity:</b>  | CD52                     |
| <b>Other names:</b>  | SWC1                     |
| <b>Format:</b>       | FITC                     |
| <b>Product Type:</b> | Monoclonal Antibody      |
| <b>Clone:</b>        | 11/305/44                |
| <b>Isotype:</b>      | IgG2b                    |
| <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        |
| Immunofluorescence |     |    | ▪              |                    |

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.

|                        |   |                            |                          |
|------------------------|---|----------------------------|--------------------------|
| <b>Target Species</b>  | Pig   |                            |                          |
| <b>Product Form</b>    | Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid                |                            |                          |
| <b>Max Ex/Em</b>       | <b>Fluorophore</b>  | <b>Excitation Max (nm)</b> | <b>Emission Max (nm)</b> |
|                        | FITC  | 490                        | 525                      |
| <b>Preparation</b>     | Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant |                            |                          |
| <b>Buffer Solution</b> | Phosphate buffered saline   |                            |                          |
| <b>Preservative</b>    | 0.09% Sodium Azide (NaN <sub>3</sub> )  |                            |                          |
| <b>Stabilisers</b>     | 1% Bovine Serum Albumin   |                            |                          |

|                                       |  |
|---------------------------------------|--|
| <b>Approx. Protein Concentrations</b> | IgG concentration 0.1 mg/ml  |
| <b>Immunogen</b>                      | Porcine thymocytes   |
| <b>External Database Links</b>        | <b>UniProt:</b><br><a href="#">H8ZRT6</a> <a href="#">Related reagents</a>   |
| <b>Fusion Partners</b>                | Spleen cells from immunized Balb/c mice were fused with cells of the SP2/0-Ag14 myeloma cell line  |
| <b>Specificity</b>                    | <p><b>Mouse anti Pig CD52, clone 11/305/44</b> recognizes the porcine homologue of human CD52, a ~19 kDa antigen expressed by mature lymphocytes, monocytes and dendritic cells.</p> <p>Mouse anti Pig CD52, clone 11/305/44 was originally clustered at the 1st International Swine Cluster of Differentiation Workshop held in 1992 as SWC1 (<a href="#">Lunney et al. 1994</a>). SWC1 is the porcine orthologue to human CD52, expressed by most leucocytes including resting T-cells, monocytes and granulocytes, but is not expressed by B-cells, erythrocytes or platelets (<a href="#">Piriou-Guyzlack et al. 2008</a>) &amp; (<a href="#">Leitner et al. 2012</a>).</p> <p>Porcine CD52, expressed at very much higher levels on monocytes than mature macrophages, and SWC9, expressed exclusively on mature tissue macrophages, have been used as markers of monocyte-macrophage differentiation (<a href="#">Sanchez et al. 1999</a>) &amp; (<a href="#">McCullough et al. 1999</a>).</p> |
| <b>Flow Cytometry</b>                 | Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul   |
| <b>References</b>                     | <ol style="list-style-type: none"> <li>Lunney, J.K. <i>et al.</i> (1994) Overview of the First International Workshop to Define Swine Leukocyte Cluster of Differentiation (CD) Antigens. <a href="#">Vet Immunol Immunopathol. 43: 193-206.</a></li> <li>Leitner, J. <i>et al.</i> (2012) Porcine SWC1 is CD52--final determination by the use of a retroviral cDNA expression library. <a href="#">Vet Immunol Immunopathol. 146 (1): 27-34.</a></li> <li>Seeboth, J. <i>et al.</i> (2012) The fungal T-2 toxin alters the activation of primary macrophages induced by TLR-agonists resulting in a decrease of the inflammatory response in the pig. <a href="#">Vet Res. 43: 35.</a></li> <li>Shao, L. <i>et al.</i> (2016) Tissue-specific mRNA expression profiles of porcine Toll-like receptors at different ages in germ-free and conventional pigs. <a href="#">Vet Immunol Immunopathol. 171: 7-16.</a></li> </ol>  |
| <b>Further Reading</b>                | <ol style="list-style-type: none"> <li>Sánchez, C. <i>et al.</i> (1999) The Porcine 2A10 Antigen is Homologous to Human CD163 and Related to Macrophage Differentiation. <a href="#">J Immunol. 162: 5230-7.</a></li> <li>McCullough, K.C. <i>et al.</i> (1999) Intermediate stages in monocyte-macrophage differentiation modulate phenotype and susceptibility to virus infection. <a href="#">Immunology. 98 (2): 203-12.</a></li> <li>Piriou-Guyzlack, L. <i>et al.</i> (2008) Membrane markers of the immune cells in swine: an update. <a href="#">Vet Res. 39: 54</a></li> </ol>  |

**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.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA5974F>  
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**Regulatory** For research purposes only

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## Related Products

### Recommended Negative Controls

[MOUSE IgG2b NEGATIVE CONTROL:FITC \(MCA691F\)](#)

### Recommended Useful Reagents

[MOUSE ANTI PIG CD203a \(MCA1973GA\)](#)

**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto:antibody_sales_us@bio-rad.com)

**Worldwide**

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: [antibody\\_sales\\_uk@bio-rad.com](mailto:antibody_sales_uk@bio-rad.com)

**Europe**

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: [antibody\\_sales\\_de@bio-rad.com](mailto: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](https://www.bio-rad-antibodies.com/datasheets)

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