

## Datasheet: MCA6045F

<b>Description:</b>	MOUSE ANTI PIG CD4:FITC
<b>Specificity:</b>	CD4
<b>Format:</b>	FITC
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	b38c6c7
<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
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.

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	0.09% Sodium Azide (NaN <sub>3</sub> )		
Stabilisers	1% Bovine Serum Albumin		
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml		

<b>Immunogen</b>	Porcine leukocytes
<b>Specificity</b>	<p><b>Mouse anti Porcine CD4, clone b38c6c7</b> recognizes a ~55 kDa porcine homologue of the human CD4 antigen found on the surface of T helper cells. Clone b38c6c7 was confirmed to bind to a member of the CD4 alpha cluster at the 'Third International Workshop on Swine Leukocyte Differentiation Antigens' (<a href="#">Haverson et al. 2001</a>).</p> <p>Porcine CD4 is a type 1 transmembrane member of the immunoglobulin superfamily. Pigs are unusual among mammalian species as they appear to have four populations of resting T lymphocytes. In addition to CD4+/CD8- and CD4-/CD8+ lymphocytes they also appear to have significant populations of CD4-/CD8- and CD4+/CD8+ cells. Lymphoblasts with a double positive phenotype have been described in other species but not in the case of mature peripheral T cells (<a href="#">Saalmuller et al. 1987</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>1. Saalmüller A <i>et al.</i> (2001) Summary of workshop findings for porcine T-lymphocyte-specific monoclonal antibodies. <a href="#">Vet Immunol Immunopathol. 80 (1-2): 35-52.</a></li> <li>2. Gabner, S., <i>et al.</i> (2014) Immune response to Cystoisospora suis in piglets: local and systemic changes in T-cell subsets and selected mRNA transcripts in the small intestine. <a href="#">Parasite Immunology 36: 277-291</a></li> <li>3. Zhao, W. <i>et al.</i> (2025) Impact of Foot-and-Mouth Disease Virus on Memory T and B Cell Populations in Swine <a href="#">Vet Microbiol. 110406. 25 Jan [Preprint]</a></li> </ol>
<b>Storage</b>	<p>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.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.</p>
<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10041 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA6045F10041">https://www.bio-rad-antibodies.com/SDS/MCA6045F10041</a>
<b>Regulatory</b>	For research purposes only

## Related Products

### Recommended Negative Controls

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

### Recommended Useful Reagents

[MOUSE ANTI PIG CD45:Alexa Fluor® 647 \(MCA1222A647\)](#)

[MOUSE ANTI PIG wCD8 ALPHA:RPE \(MCA1223PE\)](#)

[MOUSE ANTI PIG CD3:RPE \(MCA5951PE\)](#)

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batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://bio-rad-antibodies.com/datasheets)

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**Printed on 28 May 2025**

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