

Datasheet: MCA6045A647

Description:	MOUSE ANTI PIG CD4:Alexa Fluor® 647
Specificity:	CD4
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	b38c6c7
Isotype:	IgG1
Quantity:	100 TESTS

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 Alexa Fluor 647 - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	Alexa Fluor®647	650	665
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 ₃)		
Stabilisers	1% Bovine Serum Albumin		
Approx. Protein Concentrations	IgG concentration 0.05 mg/ml		
Immunogen	Porcine leukocytes		

Specificity	<p>Mouse anti Porcine CD4, clone b38c6c7 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' (Haverson et al. 2001).</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 (Saalmuller et al. 1987).</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul
References	<ol style="list-style-type: none"> 1. Saalmüller A <i>et al.</i> (2001) Summary of workshop findings for porcine T-lymphocyte-specific monoclonal antibodies. Vet Immunol Immunopathol. 80 (1-2): 35-52. 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. Parasite Immunology 36: 277–291 3. Zhao, W. <i>et al.</i> (2025) Impact of Foot-and-Mouth Disease Virus on Memory T and B Cell Populations in Swine Vet Microbiol. 110406. 25 Jan [Preprint]
Storage	<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>
Guarantee	12 months from date of despatch
Acknowledgements	<p>This product is provided under an intellectual property licence from Life Technologies Corporation. The transfer of this product is contingent on the buyer using the purchased product solely in research, excluding contract research or any fee for service research, and the buyer must not sell or otherwise transfer this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; (c) manufacturing or quality assurance or quality control, or (d) resale, whether or not resold for use in research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad CA 92008 USA or outlicensing@thermofisher.com</p>
Health And Safety Information	<p>Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA6045A647</p> <p>10041</p>
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA928A647\)](#)

Recommended Useful Reagents

[MOUSE ANTI PIG wCD8 ALPHA:FITC \(MCA1223F\)](#)

[MOUSE ANTI PIG CD3:FITC \(MCA5951F\)](#)

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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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