

Datasheet: MCA5954A647

Description:	MOUSE ANTI PIG CD8 BETA CHAIN:Alexa Fluor® 647
Specificity:	CD8 BETA
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	PPT23
Isotype:	IgG1
Quantity:	100 TESTS/1ml

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 - 1/10

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 fr 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 thymus membrane lysate		

Fusion Partners	Lymph node cells from immunized BALB/c mice were fused with cells of the NS0 myeloma cell line
Specificity	<p>Mouse anti Pig CD8 beta chain, clone PPT23, recognizes the porcine homologue of the human CD8 beta chain cell surface antigen.</p> <p>Characterization of clone PPT23, also known under the clone designation FYP1C5, has demonstrated that on peripheral blood lymphocytes and spleen, this antibody binds to cells that are CD3⁺, CD4⁻, CD8^{hi} and as such defines this antibody as a specific marker of porcine α/β T cells, in thymic tissue both CD8^{lo} and CD8^{hi} cells are recognized (Yang & Parkhouse 1997). Mouse anti Pig CD8 beta chain, clone PPT23 recognizes a different epitope on the CD8 beta chain to clone PPT22.</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 1x10 ⁶ cells in 100ul
References	<ol style="list-style-type: none"> 1. Sinkora, M. <i>et al.</i> (2007) Two groups of porcine TCRgammadelta+ thymocytes behave and diverge differently. J Immunol. 178 (2): 711-9. 2. Mair, K.H. <i>et al.</i> (2015) Carbopol improves the early cellular immune responses induced by the modified-live vaccine Ingelvac PRRS[®] MLV. Vet Microbiol. 176 (3-4): 352-7. 3. Muir, A. <i>et al.</i> (2024) Single-cell analysis reveals lasting immunological consequences of influenza infection and respiratory immunization in the pig lung. PLoS Pathog. 20 (7): e1011910. 4. Sedaghat-Rostami, E. <i>et al.</i> (2025) Porcine respiratory coronavirus as a model for acute respiratory disease: mechanisms of different infection outcomes. J Immunol. Apr 30 [Epub ahead of print].
Further Reading	1. Zuckermann, F.A. <i>et al.</i> (1998) Report on the analyses of mAb reactive with porcine CD8 for the second international swine CD workshop. Vet Immunol Immunopathol. 60 (3-4): 291-303.
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	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

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Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA5954A647
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Regulatory	For research purposes only
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Related Products

Recommended Negative Controls

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

Recommended Useful Reagents

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

[MOUSE ANTI PIG CD4 ALPHA:RPE \(MCA1749PE\)](#)

[MOUSE ANTI PIG CD4 ALPHA \(MCA1749GA\)](#)

[MOUSE ANTI PIG CD3 \(MCA5951GA\)](#)

Product inquiries: www.bio-rad-antibodies.com/technical-support

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M384343:210513'

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