

Datasheet: MCA5954PE

BATCH NUMBER 173412

Description:	MOUSE ANTI PIG CD8 BETA CHAIN:RPE
Specificity:	CD8 BETA
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	PPT23
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

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 R. Phycoerythrin (RPE) - lyophilized		
Reconstitution	Reconstitute with 1 ml distilled water		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	RPE 488nm laser	496	578
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 5% Sucrose		

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"> Sinkora, M. <i>et al.</i> (2007) Two groups of porcine TCRgammadelta+ thymocytes behave and diverge differently. J Immunol. 178 (2): 711-9. 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. 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. 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. 214 (7): 1643-1660. Jaudas, F. <i>et al.</i> (2025) Perinatal dysfunction of innate immunity in cystic fibrosis. Sci Transl Med. 17 (782): eadk9145. Tng, P.Y.L. <i>et al.</i> (2025) Early disruption of the innate-adaptive immune axis in vivo after infection with virulent Georgia 2007/1 ASFV. Discov Immunol. 4 (1): kyaf014.
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.</p> <p>Store at +4°C. DO NOT FREEZE.</p> <p>This product should be stored undiluted. This product is photosensitive and should be protected from light.</p>
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #20487 available at: https://www.bio-rad-antibodies.com/SDS/MCA5954PE
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA928PE\)](#)

Recommended Useful Reagents

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

[MOUSE ANTI PIG CD45RA:FITC \(MCA1751F\)](#)

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

[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

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