

Datasheet: MCA5954F

| Description: | MOUSE ANTI PIG CD8 BETA CHAIN:FITC |
|----------------------|------------------------------------|
| Specificity: | CD8 BETA |
| Format: | FITC |
| Product Type: | Monoclonal Antibody |
| Clone: | PPT23 |
| Isotype: | lgG1 |
| Quantity: | 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.

| | 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.

| Target Species | Pig | | | |
|--------------------------------|-----------------------------------|-----------------------------|--------------------|---------------------|
| Product Form | Purified IgG conju | ugated to Fluorescein Isoth | niocyanate Isomer | 1 (FITC) - liquid |
| Max Ex/Em | Fluorophore | Excitation Max (nm) | Emission Max (nn | n) |
| | FITC | 490 | 525 | |
| Preparation | Purified IgG prepared supernatant | ared by affinity chromatog | raphy on Protein A | from tissue culture |
| Buffer Solution | Phosphate buffer | ed saline | | |
| Preservative | 0.09% Sodium Az | zide (NaN ₃) | | |
| Stabilisers | 1% Bovine Serun | n Albumin | | |
| Approx. Protein Concentrations | lgG concentration | n 0.1 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 | Mouse anti Pig CD8 beta chain, clone PPT23, recognizes the porcine homologue of the human CD8 beta chain cell surface antigen. |
| | 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 (<u>Yang & Parkhouse 1997</u>). Mouse anti Pig CD8 beta chain, clone PPT23 recognizes a different epitope on the CD8 beta chain to clone PPT22. |
| Flow Cytometry | Use 10ul of the suggested working dilution to label 1x10 ⁶ cells in 100ul |
| References | Sinkora, M. et al. (2007) Two groups of porcine TCRgammadelta+ thymocytes behave and diverge differently. J Immunol. 178 (2): 711-9. Mair, K.H. et al. (2015) Carbopol improves the early cellular immune responses induced by the modified-life vaccine Ingelvac PRRS® MLV. Vet Microbiol. 176 (3-4): 352-7. Muir, A. et al. (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. et al. (2025) Porcine respiratory coronavirus as a model for acute |
| | respiratory disease: mechanisms of different infection outcomes. <u>J Immunol. Apr 30 [Epub ahead of print].</u> |
| 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. <u>Vet Immunol Immunopathol. 60</u> (3-4): 291-303. |
| 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. |
| Guarantee | 12 months from date of despatch |
| Health And Safety Information | Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA5954F |
| Regulatory | For research purposes only |
| | |

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:FITC (MCA928F)

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 'M384828:210513'

Printed on 25 Jun 2025

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