

Datasheet: MCA1107PE

Description:	RAT ANTI MOUSE CD4:RPE
Specificity:	CD4
Other names:	L3T4 ANTIGEN, LY-4
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	YTS177.9
Isotype:	IgG2a
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 antibody 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 antibody for use in their own system using appropriate negative/positive controls.

Target Species	Mouse						
Product Form	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized						
Reconstitution	Reconstitute with 1 ml distilled water						
Max Ex/Em	<table border="1"> <thead> <tr> <th>Fluorophore</th> <th>Excitation Max (nm)</th> <th>Emission Max (nm)</th> </tr> </thead> <tbody> <tr> <td>RPE 488nm laser</td> <td>496</td> <td>578</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	RPE 488nm laser	496	578
Fluorophore	Excitation Max (nm)	Emission Max (nm)					
RPE 488nm laser	496	578					
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant						
Buffer Solution	Phosphate buffered saline						
Preservative	0.09% sodium azide (NaN ₃)						
Stabilisers	1% bovine serum albumin 5% sucrose						

Immunogen	Mouse spleen cells.
External Database Links	<p>UniProt: P06332 Related reagents</p> <p>Entrez Gene: 12504 Cd4 Related reagents</p>
RRID	AB_324215
Fusion Partners	Spleen cells from immunised DA rats were fused with cells of the Y3/Ag1.2.3 rat myeloma cell line.
Specificity	Rat anti Mouse CD4 antibody, clone YTS177.9 reacts with the Mouse CD4 antigen, non polymorphic epitope (Qin et al. 1990). Rat anti Mouse CD4 antibody, Rat anti Mouse CD4 antibody, clone YTS177.9 reacts with CD4 transfectants (Cobbold et al. 1990). Rat anti Mouse CD4 antibody, clone YTS177.9 also blocks MHC-II dependant T-cell responses <i>in vitro</i> and <i>in vivo</i> and induces tolerance (Qin et al. 1990) and (Cobbold et al. 1990).
Flow Cytometry	Use 10µl of the suggested working dilution to label 10 ⁶ cells or 100µl of whole blood. The Fc region of monoclonal antibodies may bind to cells expressing low affinity Fc receptors. This may be reduced by using SeroBlock FcR (BUF041A/BUF041B).
References	<ol style="list-style-type: none"> 1. Qin, S.X. <i>et al.</i> (1990) Induction of tolerance in peripheral T cells with monoclonal antibodies. Eur J Immunol. 20 (12): 2737-45. 2. Cobbold, S.P. <i>et al.</i> (1990) The induction of skin graft tolerance in major histocompatibility complex-mismatched or primed recipients: primed T cells can be tolerized in the periphery with anti-CD4 and anti-CD8 antibodies. Eur J Immunol. 20 (12): 2747-55. 3. Wise, M.P. <i>et al.</i> (1998) Linked suppression of skin graft rejection can operate through indirect recognition. J Immunol. 161 (11): 5813-6. 4. Daley, S.R. <i>et al.</i> (2007) A key role for TGF-beta signaling to T cells in the long-term acceptance of allografts. J Immunol. 179: 3648-54. 5. Saunders, A. <i>et al.</i> (2009) Expression of GIMAP1, a GTPase of the immunity-associated protein family, is not up-regulated in malaria. Malar J. 8: 53. 6. Agua-Doce, A. and Graca, L. (2011) Prevention of house dust mite induced allergic airways disease in mice through immune tolerance. PLoS One. 6: e22320. 7. Carlring, J. <i>et al.</i> (2012) Conjugation of lymphoma idiotype to CD40 antibody enhances lymphoma vaccine immunogenicity and antitumor effects in mice. Blood. 119 (9): 2056-65. 8. Kim, I. <i>et al.</i> (2017) Ibrutinib suppresses alloantibody responses in a mouse model of allosensitization. Transpl Immunol. 45: 59-64. 9. Szuster-Ciesielska, A. <i>et al.</i> (2019) Immunogenic Evaluation of Ribosomal P-Protein Antigen P0, P1, and P2 and Pentameric Protein Complex P0-(P1-P2)(2) of Plasmodium falciparum in a Mouse Model. J Immunol Res. 2019: 9264217.
Storage	Prior to reconstitution store at +4°C. Following reconstitution store at +4°C.

DO NOT FREEZE.

This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee	12 months from date of despatch
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Health And Safety Information	Material Safety Datasheet documentation #20487 available at: https://www.bio-rad-antibodies.com/SDS/MCA1107PE 20487
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Regulatory	For research purposes only
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Related Products

Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL:RPE \(MCA1212PE\)](#)

Recommended Useful Reagents

[MOUSE SEROBLOCK FcR \(BUF041A\)](#)

[MOUSE SEROBLOCK FcR \(BUF041B\)](#)

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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](https://www.bio-rad-antibodies.com/datasheets)
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