

Datasheet: MCA1107F

Description:	RAT ANTI MOUSE CD4:FITC
Specificity:	CD4
Other names:	L3T4 ANTIGEN, LY-4
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	YTS177.9
Isotype:	IgG2a
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

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 Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	FITC	490	525
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% Sodium Azide		
Stabilisers	1% Bovine Serum Albumin		
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml		
Immunogen	Mouse spleen cells.		
External Database Links	UniProt: P06332 Related reagents		

Entrez Gene:[12504](#) Cd4 [Related reagents](#)

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 <i>et al.</i> 1990). Rat anti Mouse CD4 antibody, Rat anti Mouse CD4 antibody, clone YTS177.9 reacts with CD4 transfectants (Cobbold <i>et al.</i> 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 <i>et al.</i> 1990) and (Cobbold <i>et al.</i> 1990).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10⁶ cells or 100ul whole blood. The Fc region of monoclonal antibodies may bind non-specifically to cells expressing low affinity Fc receptors. This may be reduced by using SeroBlock FcR (BUF041A/B).
References	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. 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. 5. 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. 6. 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. 7. 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. 8. 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: 2056-65. 9. Kim, I. <i>et al.</i> (2017) Ibrutinib suppresses alloantibody responses in a mouse model of allosensitization. Transpl Immunol. 45: 59-64.
Storage	Store at +4°C or at -20°C if preferred. This product should be stored undiluted. Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
Shelf Life	18 months from date of despatch.
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: 10041: https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL:FITC \(MCA1212F\)](#)

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