

Datasheet: MCA1107EL

BATCH NUMBER 158335

Description:	RAT ANTI MOUSE CD4:Low Endotoxin
Specificity:	CD4
Other names:	L3T4 ANTIGEN, LY-4
Format:	Low Endotoxin
Product Type:	Monoclonal Antibody
Clone:	YTS177.9
Isotype:	IgG2a
Quantity:	0.5 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	▪			1/50 - 1/200
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	
Functional Assays	▪			

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 - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative	None present

Stabilisers

Carrier Free Yes

Approx. Protein Concentrations IgG concentration 1.0 mg/ml

Immunogen Mouse spleen cells.

External Database Links

UniProt:
[P06332](#) [Related reagents](#)

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

RRID AB_808423

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 *in vitro* and *in vivo* and induces tolerance ([Qin et al. 1990](#)) and [Cobbold et al. 1990](#)).

Flow Cytometry Use 10ul of the suggested working dilution to label 10⁶ cells in 100ul.

References

1. Qin, S.X. *et al.* (1990) Induction of tolerance in peripheral T cells with monoclonal antibodies. [Eur J Immunol. 20 \(12\): 2737-45.](#)
2. Cobbold, S.P. *et al.* (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. *et al.* (1998) Linked suppression of skin graft rejection can operate through indirect recognition. [J Immunol. 161 \(11\): 5813-6.](#)
4. Carlring, J. *et al.* (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. *et al.* (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. *et al.* (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. *et al.* (2012) Conjugation of lymphoma idiotype to CD40 antibody enhances lymphoma vaccine immunogenicity and antitumor effects in mice. [Blood. 119: 2056-65.](#)
9. Kim, I. *et al.* (2017) Ibrutinib suppresses alloantibody responses in a mouse model of allosensitization. [Transpl Immunol. 45: 59-64.](#)

10. Agnieszka, S. *et al.* (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 [Journal of Immunology Research. 2019: 1-19.](#)

Storage Store at -20°C only.

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10162 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1107EL>
10162

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)	DyLight®800
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (STAR72...)	HRP
Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR21...)	HRP
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight®550 , DyLight®650 , DyLight®800
Goat Anti Rat IgG (STAR131...)	Alk. Phos. , Biotin

Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL:Low Endotoxin \(MCA1212EL\)](#)

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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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