

Datasheet: MCA1107EL

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 Stabilisers	None present
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](#)

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.](#)

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.

Shelf Life 18 months from date of despatch.

**Health And Safety
Information** Material Safety Datasheet documentation #10162 available at:
10162: <https://www.bio-rad-antibodies.com/uploads/MSDS/10162.pdf>

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)	DyLight®800
Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR21...)	HRP
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight®549 , DyLight®649 , DyLight®800
Goat Anti Rat IgG (STAR131...)	Alk. Phos. , Biotin
Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR72...)	HRP

Recommended Negative Controls

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

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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