

## Datasheet: MCA1107EL

<b>Description:</b>	RAT ANTI MOUSE CD4:Low Endotoxin
<b>Specificity:</b>	CD4
<b>Other names:</b>	L3T4 ANTIGEN, LY-4
<b>Format:</b>	Low Endotoxin
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	YTS177.9
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	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](http://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.

<b>Target Species</b>	Mouse
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	None present

<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Mouse spleen cells.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P06332</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">12504</a> Cd4    <a href="#">Related reagents</a></p>
<b>RRID</b>	AB_808423
<b>Fusion Partners</b>	Spleen cells from immunised DA rats were fused with cells of the Y3/Ag1.2.3 rat myeloma cell line.
<b>Specificity</b>	<b>Rat anti Mouse CD4 antibody, clone YTS177.9</b> reacts with the Mouse CD4 antigen, non polymorphic epitope ( <a href="#">Qin et al. 1990</a> ). Rat anti Mouse CD4 antibody, Rat anti Mouse CD4 antibody, clone YTS177.9 reacts with CD4 transfectants ( <a href="#">Cobbold et al. 1990</a> ). 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 ( <a href="#">Qin et al. 1990</a> ) and ( <a href="#">Cobbold et al. 1990</a> ).
<b>Flow Cytometry</b>	Use 10µl of the suggested working dilution to label 10 <sup>6</sup> cells in 100µl
<b>References</b>	<ol style="list-style-type: none"> <li>1. Qin, S.X. <i>et al.</i> (1990) Induction of tolerance in peripheral T cells with monoclonal antibodies. <a href="#">Eur J Immunol. 20 (12): 2737-45.</a></li> <li>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. <a href="#">Eur J Immunol. 20 (12): 2747-55.</a></li> <li>3. Wise, M.P. <i>et al.</i> (1998) Linked suppression of skin graft rejection can operate through indirect recognition. <a href="#">J Immunol. 161 (11): 5813-6.</a></li> <li>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. <a href="#">J Immunol. 179: 3648-54.</a></li> <li>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. <a href="#">Malar J. 8: 53.</a></li> <li>6. Agua-Doce, A. and Graca, L. (2011) Prevention of house dust mite induced allergic airways disease in mice through immune tolerance. <a href="#">PLoS One. 6: e22320.</a></li> <li>7. Carling, J. <i>et al.</i> (2012) Conjugation of lymphoma idiotype to CD40 antibody enhances lymphoma vaccine immunogenicity and antitumor effects in mice. <a href="#">Blood. 119 (9): 2056-65.</a></li> <li>8. Kim, I. <i>et al.</i> (2017) Ibrutinib suppresses alloantibody responses in a mouse model of allosensitization. <a href="#">Transpl Immunol. 45: 59-64.</a></li> <li>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. <a href="#">J Immunol Res. 2019: 9264217.</a></li> </ol>

**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.

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**Guarantee** 12 months from date of despatch

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

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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

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

### Recommended Negative Controls

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

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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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://bio-rad-antibodies.com/datasheets)  
'M408117:221010'

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