

Datasheet: MCA1107EL

BATCH NUMBER 1712

| | |
|----------------------|----------------------------------|
| 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 \(MCA1212EL\)](#)

North & South Tel: +1 800 265 7376

America 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

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)

'M364785:200529'

Printed on 19 Jan 2024

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