

## Datasheet: MCA153GA

**BATCH NUMBER 160051**

<b>Description:</b>	MOUSE ANTI RAT CD4 (DOMAIN 2)
<b>Specificity:</b>	CD4 (DOMAIN 2)
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	OX-35
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/10 - 1/50
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting			▪	
Immunofluorescence	▪			

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>	Rat
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide
<b>Carrier Free</b>	Yes

<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	MLR generated rat T helper lymphocytes.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P05540</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">24932</a> Cd4    <a href="#">Related reagents</a></p>
<b>RRID</b>	AB_567278
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS1 myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Rat CD4 (domain 2) antibody, clone OX-35</b> recognizes the rat CD4 cell surface antigen, a ~55kDa glycoprotein expressed by helper T cells and weakly by monocytes.</p> <p>Mouse anti Rat CD4 (Domain 2) antibody, clone OX-35 recognizes a different epitope on the CD4 molecule to Mouse anti Rat CD4 antibody, <a href="#">clone W3/25</a>.</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
<b>References</b>	<ol style="list-style-type: none"> <li>1. Wang, C.C. <i>et al.</i> (1996) Immunohistochemical study of amoeboid microglial cells in fetal rat brain. <a href="#">J Anat. 189 ( Pt 3): 567-74.</a></li> <li>2. Jefferies, W.A. <i>et al.</i> (1985) Authentic T helper CD4 (W3/25) antigen on rat peritoneal macrophages. <a href="#">J Exp Med. 162 (1): 117-27.</a></li> <li>3. Camelo, S. <i>et al.</i> (2004) The distribution of antigen in lymphoid tissues following its injection into the anterior chamber of the rat eye. <a href="#">J Immunol. 172: 5388-95.</a></li> <li>4. Elflein, K. <i>et al.</i> (2003) Rapid recovery from T lymphopenia by CD28 superagonist therapy. <a href="#">Blood. 102: 1764-70.</a></li> <li>5. Scherr, M. <i>et al.</i> (2002) Efficient gene transfer into the CNS by lentiviral vectors purified by anion exchange chromatography. <a href="#">Gene Ther. 9: 1708-14.</a></li> <li>6. Cho, K.S. <i>et al.</i> (2010) Mechanism analysis of long-term graft survival by monocarboxylate transporter-1 inhibition. <a href="#">Transplantation. 90: 1299-306.</a></li> <li>7. Chang, C.J. <i>et al.</i> (2004) The immunization site of cytokine-secreting tumor cell vaccines influences the trafficking of tumor-specific T lymphocytes and antitumor efficacy against regional tumors. <a href="#">J Immunol. 173: 6025-32.</a></li> <li>8. Basiri, M. and Doucette, R. (2010) Sensorimotor cortex aspiration: a model for studying Wallerian degeneration-induced glial reactivity along the entire length of a single CNS axonal pathway. <a href="#">Brain Res Bull. 81: 43-52.</a></li> <li>9. Esquifino, A.I. <i>et al.</i> (2007) Immune response after experimental allergic encephalomyelitis in rats subjected to calorie restriction. <a href="#">J Neuroinflammation. 4:6.</a></li> <li>10. Zhao, S. <i>et al.</i> (2007) Extensive FDG uptake and its modification with corticosteroid in a granuloma rat model: an experimental study for differentiating granuloma from tumors.</li> </ol>

[Eur J Nucl Med Mol Imaging 34: 2096-105.](#)

11. Yan, Y. *et al.* (2003) Pathogenesis of autoimmunity after xenogeneic thymus transplantation. [J Immunol. 170: 5936-46.](#)

12. Li, Q. *et al.* (2019) Dendritic cell-targeted CD40 DNA vaccine suppresses Th17 and ameliorates progression of experimental autoimmune glomerulonephritis [Journal of Leukocyte Biology. 27 Feb \[Epub ahead of print\].](#)

13. Thirion-Delalande, C. *et al.* (2017) Comparative analysis of the oral mucosae from rodents and non-rodents: Application to the nonclinical evaluation of sublingual immunotherapy products. [PLoS One. 12 \(9\): e0183398.](#)

14. James, R.E. *et al.* (2020) Persistent elevation of intrathecal pro-inflammatory cytokines leads to multiple sclerosis-like cortical demyelination and neurodegeneration. [Acta Neuropathol Commun. 8 \(1\): 66.](#)

15. Dabrowska, S. *et al.* (2021) Neuroinflammation evoked by brain injury in a rat model of lacunar infarct. [Exp Neurol. 336: 113531.](#)

16. Gad, R.A. *et al.* (2022) Mitigating effects of *Passiflora incarnata*. on oxidative stress and neuroinflammation in case of pilocarpine-Induced status epilepticus model. [J King Saud Uni - Science. 34 \(3\): 101886.](#)

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<b>Storage</b>	This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.
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Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

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<b>Guarantee</b>	12 months from date of despatch
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<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA153GA">https://www.bio-rad-antibodies.com/SDS/MCA153GA</a> 10040
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<b>Regulatory</b>	For research purposes only
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## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">Alk. Phos.</a> , <a href="#">HRP</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (H/L) (STAR117...)	<a href="#">Alk. Phos.</a> , <a href="#">DyLight@488</a> , <a href="#">DyLight@550</a> , <a href="#">DyLight@650</a> , <a href="#">DyLight@680</a> , <a href="#">DyLight@800</a> , <a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>

## Recommended Negative Controls

### MOUSE IgG2a NEGATIVE CONTROL (MCA1210)

**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto: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](mailto: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](mailto: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://bio-rad-antibodies.com/datasheets)

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