

## Datasheet: MCA44GA

**BATCH NUMBER 1013**

<b>Description:</b>	MOUSE ANTI RAT CD200
<b>Specificity:</b>	CD200
<b>Other names:</b>	OX2
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	OX-2
<b>Isotype:</b>	IgG1
<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	▪			1/50 - 1/100
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting			▪	
Immunofluorescence	▪			
Immuno-electron Microscopy	▪			

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 G from tissue culture supernatant
<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>	Rat thymocyte membrane glycoproteins.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P04218</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">24560</a>    Cd200    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	Mox2
<b>RRID</b>	AB_2073959
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells from the NS1 mouse myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Rat CD200 antibody, clone OX-2</b> recognizes the rat CD200 cell surface antigen, also known as OX-2, a type I membrane glycoprotein, expressed on rat thymocytes, neurons, follicular dendritic cells, endothelium and at low levels on some B cells and smooth muscle cells.</p> <p>Studies have indicated that the CD200-CD200 ligand system is important in the control of macrophage and granulocyte activation and that this antibody blocks OX-2 mediated T cell costimulation (<a href="#">Ko et al. 2009</a>).</p> <p>This product is routinely tested by flow cytometry on rat thymocytes.</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. Barclay, A.N. (1981) Different reticular elements in rat lymphoid tissue identified by localization of Ia, Thy-1 and MRC OX 2 antigens. <a href="#">Immunology. 44 (4): 727-36.</a></li> <li>2. Webb, M. &amp; Barclay, A.N. (1984) Localisation of the MRC OX-2 glycoprotein on the surfaces of neurones. <a href="#">J Neurochem. 43 (4): 1061-7.</a></li> <li>3. Matsumoto, H. et al. (2007) Expression of CD200 by macrophage-like cells in ischemic core of rat brain after transient middle cerebral artery occlusion. <a href="#">Neurosci Lett. 418: 44-8.</a></li> <li>4. Borriello, F. et al. (1997) MRC OX-2 defines a novel T cell costimulatory pathway. <a href="#">J Immunol. 158 (10): 4548-54.</a></li> <li>5. Dick, A.D. et al. (2001) Distribution of OX2 antigen and OX2 receptor within retina. <a href="#">Invest Ophthalmol Vis Sci. 42: 170-6.</a></li> <li>6. Ko, Y.C. et al. (2009) Endothelial CD200 is heterogeneously distributed, regulated and involved in immune cell-endothelium interactions. <a href="#">J Anat. 214: 183-95.</a></li> </ol>

7. Preston, S. *et al.* (1997) The leukocyte/neuron cell surface antigen OX2 binds to a ligand on macrophages. [Eur J Immunol. 27: 1911-8.](#)
8. Bartolome, M.V. *et al.* (2002) Transitional expression of OX-2 and GAP-43 glycoproteins in developing rat cochlear nerve fibers. [Histol Histopathol. 17: 83-95.](#)
9. Tsai, M.H. *et al.* (2015) CD200 in growing rat lungs: developmental expression and control by dexamethasone. [Cell Tissue Res. 359 \(3\): 729-42.](#)

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**Further Reading** 1. Clark, M.J. *et al.* (1985) MRC OX-2 antigen: a lymphoid/neuronal membrane glycoprotein with a structure like a single immunoglobulin light chain. [EMBO J. 4 \(1\): 113-8.](#)

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**Storage** Store at +4°C or at -20°C if preferred.

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 #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA44GA>  
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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...) [RPE](#)  
 Goat Anti Mouse IgG IgA IgM (STAR87...) [HRP](#)  
 Goat Anti Mouse IgG (STAR76...) [RPE](#)  
 Rabbit Anti Mouse IgG (STAR13...) [HRP](#)  
 Goat Anti Mouse IgG (STAR70...) [FITC](#)  
 Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®550](#),  
[DyLight®650](#), [DyLight®680](#), [DyLight®800](#),  
[FITC](#), [HRP](#)  
 Rabbit Anti Mouse IgG (STAR9...) [FITC](#)  
 Goat Anti Mouse IgG (STAR77...) [HRP](#)  
 Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA1209\)](#)

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

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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)

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