

## Datasheet: MCA1958

**BATCH NUMBER 1707**

<b>Description:</b>	RAT ANTI MOUSE CD200
<b>Specificity:</b>	CD200
<b>Other names:</b>	OX2
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	OX-90
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	0.25 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			▪	

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. 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>	0.09% Sodium Azide

<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0mg/ml
<b>Immunogen</b>	Mouse CD200-rat CD4 fusion protein.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">O54901</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">17470</a> Cd200    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	Mox2
<b>RRID</b>	AB_323317
<b>Fusion Partners</b>	Spleen cells from immunised rats were fused with cells of the rat Y3 myeloma cell line
<b>Specificity</b>	<p><b>Rat anti Mouse CD200 antibody, clone OX-90</b> recognizes the mouse CD200 cell surface antigen, also known as OX2.</p> <p>CD200 is expressed by splenic B lymphocytes, follicular dendritic cells, splenic endothelium and by neurons.</p> <p>Studies have suggested that the CD200 - CD200 ligand system is of importance in the control of macrophage and granulocyte activation.</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
<b>Histology Positive Control Tissue</b>	Mouse spleen
<b>References</b>	<ol style="list-style-type: none"> <li>1. Hoek, R.M. <i>et al.</i> (2000) Down-regulation of the macrophage lineage through interaction with OX2 (CD200). <a href="#">Science. 290 (5497): 1768-71.</a></li> <li>2. Nathan, C. &amp; Muller, W.A. (2001) Putting the brakes on innate immunity: a regulatory role for CD200? <a href="#">Nat Immunol. 2 (1): 17-9.</a></li> <li>3. Broderick, C. <i>et al.</i> (2002) Constitutive retinal CD200 expression regulates resident microglia and activation state of inflammatory cells during experimental autoimmune uveoretinitis. <a href="#">Am J Pathol. 161 (5): 1669-77.</a></li> <li>4. Seeds, R.E. <i>et al.</i> (2011) The role of myeloid receptors on murine plasmacytoid dendritic cells in induction of type I interferon. <a href="#">Int Immunopharmacol. 11 (7): 794-801.</a></li> <li>5. Burger, P.E. <i>et al.</i> (2009) High aldehyde dehydrogenase activity: a novel functional marker of murine prostate stem/progenitor cells. <a href="#">Stem Cells. 27: 2220-8.</a></li> <li>6. Garza, L.A. <i>et al.</i> (2011) Bald scalp in men with androgenetic alopecia retains hair follicle stem cells but lacks CD200-rich and CD34-positive hair follicle progenitor cells. <a href="#">J Clin Invest. 121: 613-22.</a></li> <li>7. Ko, Y.C. <i>et al</i> (2009) Endothelial CD200 is heterogeneously distributed, regulated and</li> </ol>

- involved in immune cell-endothelium interactions. [J Anat. 214: 183-95.](#)
8. Koning, N. *et al.* (2009) Distribution of the immune inhibitory molecules CD200 and CD200R in the normal central nervous system and multiple sclerosis lesions suggests neuron-glia and glia-glia interactions. [J Neuropathol Exp Neurol. 68: 159-67.](#)
9. Krejsek, J. *et al.* (2010) Expression of CD200/CD200R regulatory molecules on granulocytes and monocytes is modulated by cardiac surgical operation. [Perfusion. 25: 389-97.](#)
10. Rijkers, E.S. (2007) Ligation of CD200R by CD200 is not required for normal murine myelopoiesis. [Eur J Haematol. 79: 410-6.](#)
11. Rijkers, E.S. *et al.* (2008) The inhibitory CD200R is differentially expressed on human and mouse T and B lymphocytes. [Mol Immunol. 45: 1126-35.](#)
12. Liu, J.Q. *et al.* (2016) A Critical Role for CD200R Signaling in Limiting the Growth and Metastasis of CD200+ Melanoma. [J Immunol. Jul 6. pii: 1600052. \[Epub ahead of print\]](#)
13. Montiel, M. *et al.* (2016) Melatonin decreases brain apoptosis, oxidative stress, and CD200 expression and increased survival rate in mice infected by Venezuelan equine encephalitis virus. [Antivir Chem Chemother. Aug 8. pii: 2040206616660851. \[Epub ahead of print\]](#)
14. Liu, C. *et al.* (2018) The role of N-glycosylation of CD200-CD200R1 interaction in classical microglial activation. [J Inflamm \(Lond\). 15: 28.](#)

---

**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.

---

**Guarantee** 12 months from date of despatch

---

**Health And Safety Information** Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1958>  
10040

---

**Regulatory** For research purposes only

---

## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)	<a href="#">DyLight@800</a>
Rabbit Anti Rat IgG (STAR17...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR72...)	<a href="#">HRP</a>
Goat Anti Rat IgG (STAR69...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR73...)	<a href="#">RPE</a>
Rabbit Anti Rat IgG (STAR21...)	<a href="#">HRP</a>
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	<a href="#">DyLight@550</a> , <a href="#">DyLight@650</a> , <a href="#">DyLight@800</a>
Goat Anti Rat IgG (STAR131...)	<a href="#">Alk. Phos.</a> , <a href="#">Biotin</a>

## Recommended Negative Controls

### [RAT IgG2a NEGATIVE CONTROL \(MCA1212\)](#)

**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)  
'M365986:200529'

**Printed on 20 Jan 2024**

---

© 2024 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)