

## Datasheet: MCA1959PE

**BATCH NUMBER 171912**

<b>Description:</b>	MOUSE ANTI RAT CD200 RECEPTOR 1:RPE
<b>Specificity:</b>	CD200 RECEPTOR 1
<b>Other names:</b>	OX2 RECEPTOR 1
<b>Format:</b>	RPE
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	OX-102
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	100 TESTS

### 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	▪			Neat - 1/10

Where this product 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 product for use in their own system using appropriate negative/positive controls.

<b>Target Species</b>	Rat		
<b>Product Form</b>	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized		
<b>Reconstitution</b>	Reconstitute with 1ml distilled water		
<b>Max Ex/Em</b>	<b>Fluorophore</b>	<b>Excitation Max (nm)</b>	<b>Emission Max (nm)</b>
	RPE 488nm laser	496	578
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant		
<b>Buffer Solution</b>	Phosphate buffered saline		
<b>Preservative</b>	0.09% sodium azide (NaN <sub>3</sub> )		
<b>Stabilisers</b>	1% bovine serum albumin		

5% sucrose

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**Immunogen** Membrane fraction of thioglycollate-elicited rat peripheral cells.

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**External Database Links**

**UniProt:**

[Q9ES58](#) [Related reagents](#)

**Entrez Gene:**

[64357](#) Cd200r1 [Related reagents](#)

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**Synonyms** Mox2r, Ox2r

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**RRID** AB\_2074189

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**Fusion Partners** Spleen cells from immunised Balb/c mice were fused with cells of the mouse NS1 myeloma cell line.

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**Specificity** **Mouse anti Rat CD200 Receptor 1 antibody, clone OX-102** recognizes the rat OX2 (CD200) receptor 1. This antigen is a heavily glycosylated ~60-100 kDa cell surface molecule expressed by cells of the myeloid lineage but not by T or B lymphocytes.

Mouse anti Rat CD200 Receptor 1 antibody, clone OX-102 has been shown to block the interaction of OX2 receptor 1 with CD200 ([Bushell et al. 2008](#)).

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**Flow Cytometry** Use 10µl of the suggested working dilution to label 10<sup>6</sup> cells in 100µl

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**References**

1. Nathan, C. & Muller, W.A. (2001) Putting the brakes on innate immunity: a regulatory role for CD200? [Nat Immunol. 2 \(1\): 17-9.](#)
2. Dick, A.D. et al. (2001) Distribution of OX2 antigen and OX2 receptor within retina. [Invest Ophthalmol Vis Sci. 42 \(1\): 170-6.](#)
3. Banerjee, D. & Dick, A.D. (2004) Blocking CD200-CD200 receptor axis augments NOS-2 expression and aggravates experimental autoimmune uveoretinitis in Lewis rats. [Ocul Immunol Inflamm. 12 \(2\): 115-25.](#)
4. Meuth, S.G. et al. (2008) CNS inflammation and neuronal degeneration is aggravated by impaired CD200-CD200R-mediated macrophage silencing. [J Neuroimmunol. 194 \(1-2\): 62-9.](#)
5. Matsumoto, S. et al. (2015) CD200+ and CD200- macrophages accumulated in ischemic lesions of rat brain: the two populations cannot be classified as either M1 or M2 macrophages. [J Neuroimmunol. 282: 7-20.](#)
6. Nicholls, S.M. et al. (2015) Local targeting of the CD200-CD200R axis does not promote corneal graft survival. [Exp Eye Res. 130: 1-8.](#)
7. Xie, X. et al. (2017) Monocytes, microglia, and CD200-CD200R1 signaling are essential in the transmission of inflammation from the periphery to the central nervous system. [J Neurochem. 141 \(2\): 222-35.](#)
8. Chang, J.C. et al. (2019) Early Immune Response to Acute Gastric Fluid Aspiration in a Rat Model of Lung Transplantation. [Exp Clin Transplant. 17 \(1\): 84-92.](#)
9. Qian, H. et al. (2024) Activation of the CD200/CD200R1 axis improves cognitive

impairment by enhancing hippocampal neurogenesis via suppression of M1 microglial polarization and neuroinflammation in hypoxic-ischemic neonatal rats. [Int Immunopharmacol. 128: 111532.](#)

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**Storage** This product is shipped at ambient temperature.  
Prior to reconstitution store at +4°C. Following reconstitution store at +4°C.  
DO NOT FREEZE.  
This product should be stored undiluted. This product is photosensitive and should be protected from light. 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 #20487 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1959PE>

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**Regulatory** For research purposes only

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## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA1209PE\)](#)

**Product inquiries:** [www.bio-rad-antibodies.com/technical-support](http://www.bio-rad-antibodies.com/technical-support)

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](http://bio-rad-antibodies.com/datasheets)  
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