

## Datasheet: MCA1959

<b>Description:</b>	MOUSE ANTI RAT CD200 RECEPTOR 1
<b>Specificity:</b>	CD200 RECEPTOR 1
<b>Other names:</b>	OX2 RECEPTOR 1
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	OX-102
<b>Isotype:</b>	IgG1
<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	▪			
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>	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 1.0mg/ml
<b>Immunogen</b>	Membrane fraction of thioglycollate-elicited rat peripheral cells.

**External Database  
Links**

**UniProt:**

[Q9ES58](#)    [Related reagents](#)

**Entrez Gene:**

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

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**Synonyms**

Mox2r, Ox2r

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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 10ul of the suggested working dilution to label 10<sup>6</sup> cells in 100ul.

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**References**

1. Wright, G.J. *et al.* (2000) Lymphoid/neuronal cell surface OX2 glycoprotein recognizes a novel receptor on macrophages implicated in the control of their function. [Immunity. 13 \(2\): 233-42.](#)
2. Nathan, C. & Muller, W.A. (2001) Putting the brakes on innate immunity: a regulatory role for CD200? [Nat Immunol. 2 \(1\): 17-9.](#)
3. Dick, A.D. *et al.* (2001) Distribution of OX2 antigen and OX2 receptor within retina. [Invest Ophthalmol Vis Sci. 42 \(1\): 170-6.](#)
4. 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.](#)
5. 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.](#)
6. 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.](#)
7. Lin, S.S. *et al.* (2012) Immune Characterization of Wild-Caught *Rattus norvegicus* Suggests Diversity of Immune Activity in Biome-Normal Environments [Journal of Evolutionary Medicine. 1: 1-16.](#)
8. 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.](#)
9. 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. Feb 6. \[Epub ahead of print\]](#)

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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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**Shelf Life**

18 months from date of despatch.

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

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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR76...) [RPE](#)  
Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)  
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight@488](#), [DyLight@549](#),  
[DyLight@649](#), [DyLight@680](#), [DyLight@800](#),  
[FITC](#), [HRP](#)  
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)  
Goat Anti Mouse IgG (STAR77...) [HRP](#)  
Rabbit Anti Mouse IgG (STAR12...) [RPE](#)  
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)  
Rabbit Anti Mouse IgG (STAR8...) [DyLight@800](#)  
Goat Anti Mouse IgG (STAR70...) [FITC](#)  
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)  
Human Anti Mouse IgG1 (HCA036...) [HRP](#)

### Recommended Negative Controls

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

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