Datasheet: MCA1959PE

Description:	MOUSE ANTI RAT CD200 RECEPTOR 1:RPE
Specificity:	CD200 RECEPTOR 1
Other names:	OX2 RECEPTOR 1
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	OX-102
Isotype:	IgG1
Quantity:	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.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat - 1/10

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.

Target Species

Rat

Product Form

Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized

Reconstitution

Reconstitute with 1ml distilled water

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
RPE 488nm laser	496	578

Preparation

Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.09% Sodium Azide
1% Bovine Serum Albumin
5% Sucrose

Immunogen	Membrane fraction of thioglycollate-elicited rat peripheral cells.
External Database Links	**UniProt:** Q9ES58 Related reagents **Entrez Gene:** 64357 Cd200r1 Related reagents
Synonyms	Mox2r, Ox2r
RRID	AB_2074189
Fusion Partners	Spleen cells from immunised Balb/c mice were fused with cells of the mouse NS1 myeloma cell line.
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).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.
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]
10. 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.

Storage	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.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #20487 available at: 20487: https://www.bio-rad-antibodies.com/uploads/MSDS/20487.pdf
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:RPE (MCA1209PE)

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Worldwide Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: 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

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