

Datasheet: MCA1958PE

Description:	RAT ANTI MOUSE CD200:RPE
Specificity:	CD200
Other names:	OX2
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	OX-90
Isotype:	IgG2a
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	■			

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.

Target Species	Mouse						
Product Form	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized						
Reconstitution	Reconstitute with 1ml distilled water						
Max Ex/Em	<table border="1"> <thead> <tr> <th>Fluorophore</th> <th>Excitation Max (nm)</th> <th>Emission Max (nm)</th> </tr> </thead> <tbody> <tr> <td>RPE 488nm laser</td> <td>496</td> <td>578</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	RPE 488nm laser	496	578
Fluorophore	Excitation Max (nm)	Emission Max (nm)					
RPE 488nm laser	496	578					
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant						
Buffer Solution	Phosphate buffered saline						
Preservative	0.09% Sodium Azide						
Stabilisers	1% Bovine Serum Albumin 5% Sucrose						
Immunogen	Mouse CD200-rat CD4 fusion protein.						
External Database Links	UniProt: O54901 Related reagents Entrez Gene:						

Synonyms	Mox2
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RRID	AB_324640
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Fusion Partners	Spleen cells from immunised rats were fused with cells of the rat Y3 myeloma cell line
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Specificity	<p>Rat anti Mouse CD200 antibody, clone OX-90 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>
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Flow Cytometry	<p>Use 10ul of the suggested working dilution to label 10⁶ cells in 100ul.</p> <p>The Fc region of monoclonal antibodies may bind non-specifically to cells expressing low affinity fc receptors. This may be reduced by using SeroBlock FcR (BUF041A/B).</p>
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References	<ol style="list-style-type: none">1. Hoek, R.M. <i>et al.</i> (2000) Down-regulation of the macrophage lineage through interaction with OX2 (CD200). Science. 290 (5497): 1768-71.2. Nathan, C. & Muller, W.A. (2001) Putting the brakes on innate immunity: a regulatory role for CD200? Nat Immunol. 2 (1): 17-9.3. Broderick, C. <i>et al.</i> (2002) Constitutive retinal CD200 expression regulates resident microglia and activation state of inflammatory cells during experimental autoimmune uveoretinitis. Am J Pathol. 161 (5): 1669-77.4. Seeds, R.E. <i>et al.</i> (2011) The role of myeloid receptors on murine plasmacytoid dendritic cells in induction of type I interferon. Int Immunopharmacol. 11 (7): 794-801.5. Burger, P.E. <i>et al.</i> (2009) High aldehyde dehydrogenase activity: a novel functional marker of murine prostate stem/progenitor cells. Stem Cells. 27: 2220-8.6. 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. J Clin Invest. 121: 613-22.7. Ko, Y.C. <i>et al.</i> (2009) Endothelial CD200 is heterogeneously distributed, regulated and involved in immune cell-endothelium interactions. J Anat. 214: 183-95.8. Koning, N. <i>et al.</i> (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. <i>et al.</i> (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. <i>et al.</i> (2008) The inhibitory CD200R is differentially expressed on human and mouse T and B lymphocytes. Mol Immunol. 45: 1126-35.12. Liu, J.Q. <i>et al.</i> (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. <i>et al.</i> (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]
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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

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 #10075 available at:
10075: <https://www.bio-rad-antibodies.com/uploads/MSDS/10075.pdf>

Regulatory

For research purposes only

Related Products

Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL:RPE \(MCA1212PE\)](#)

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'M365996:200529'

Printed on 11 Aug 2020