

Datasheet: MCA1958A488

Description:	RAT ANTI MOUSE CD200:Alexa Fluor® 488
Specificity:	CD200
Other names:	OX2
Format:	ALEXA FLUOR® 488
Product Type:	Monoclonal Antibody
Clone:	OX-90
Isotype:	IgG2a
Quantity:	100 TESTS/1ml

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

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.

Target Species	Mouse		
Product Form	Purified IgG conjugated to Alexa Fluor® 488 - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	Alexa Fluor®488	495	519
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% sodium azide (NaN ₃)		
Stabilisers	1% bovine serum albumin		
Approx. Protein Concentrations	IgG concentration 0.05 mg/ml		

Immunogen	Mouse CD200-rat CD4 fusion protein.
External Database Links	<p>UniProt: O54901 Related reagents</p> <p>Entrez Gene: 17470 Cd200 Related reagents</p>
Synonyms	Mox2
Fusion Partners	Spleen cells from immunised rats were fused with cells of the rat Y3 myeloma cell line
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>The CD200 - CD200 ligand system is of importance in the control of macrophage and granulocyte activation.</p>
Flow Cytometry	<p>Use 10µl of the suggested working dilution to label 10⁶ cells in 100µl.</p> <p>The Fc region of monoclonal antibodies may bind to cells expressing low affinity fc receptors. This may be reduced by using SeroBlock FcR (BUF041A/BUF041B).</p>
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. Rijkers, E.S. (2007) Ligation of CD200R by CD200 is not required for normal murine myelopoiesis. Eur J Haematol. 79: 410-6. 4. 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. 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. 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. 7. 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. 8. 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. 9. 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. 10. Montiel, M. <i>et al.</i> (2015) Melatonin decreases brain apoptosis, oxidative stress, and CD200 expression and increased survival rate in mice infected by Venezuelan equine

encephalitis virus. [Antivir Chem Chemother. 24 \(3-4\): 99-108.](#)

11. Liu, J.Q. *et al.* (2016) A Critical Role for CD200R Signaling in Limiting the Growth and Metastasis of CD200+ Melanoma. [J Immunol. 197 \(4\): 1489-97.](#)

12. Liu, C. *et al.* (2018) The role of N-glycosylation of CD200-CD200R1 interaction in classical microglial activation. [J Inflamm \(Lond\). 15: 28.](#)

13. Tonecka, K. *et al.* (2021) The CD200 Regulates Inflammation in Mice Independently of TNF- α Production. [Int J Mol Sci. 22 \(10\): 5358.](#)

14. Pannunzio, B. *et al.* (2022) CD200R1 Contributes to Successful Functional Reinnervation after a Sciatic Nerve Injury [Cells. 11 \(11\): 1786.](#)

Storage This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.

Guarantee 12 months from date of despatch

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Health And Safety Information Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1958A488>
10041

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL:Alexa Fluor® 488 \(MCA1212A488\)](#)

Recommended Useful Reagents

[MOUSE SEROBLOCK FcR \(BUF041A\)](#)

[MOUSE SEROBLOCK FcR \(BUF041B\)](#)

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