

Datasheet: MCA1958B

Description:	RAT ANTI MOUSE CD200:Biotin
Specificity:	CD200
Other names:	OX2
Format:	Biotin
Product Type:	Monoclonal Antibody
Clone:	OX-90
Isotype:	IgG2a
Quantity:	0.1 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.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			

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 biotin - liquid
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 0.1 mg/ml
Immunogen	Mouse CD200-rat CD4 fusion protein.

**External Database
Links**

UniProt:

[O54901](#) [Related reagents](#)

Entrez Gene:

[17470](#) Cd200 [Related reagents](#)

Synonyms

Mox2

RRID

AB_323852

Fusion Partners

Spleen cells from immunised rats were fused with cells of the rat Y3 myeloma cell line

Specificity

Rat anti Mouse CD200 antibody, clone OX-90 recognizes the mouse CD200 cell surface antigen, also known as OX2.

CD200 is expressed by splenic B lymphocytes, follicular dendritic cells, splenic endothelium and by neurons.

The CD200 - CD200 ligand system is of importance in the control of macrophage and granulocyte activation.

Flow Cytometry

Use 10µl of the suggested working dilution to label 10⁶ cells in 100µl.

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](#)).

References

1. Hoek, R.M. *et al.* (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. *et al.* (2008) The inhibitory CD200R is differentially expressed on human and mouse T and B lymphocytes. [Mol Immunol. 45: 1126-35.](#)
5. Burger, P.E. *et al.* (2009) High aldehyde dehydrogenase activity: a novel functional marker of murine prostate stem/progenitor cells. [Stem Cells. 27: 2220-8.](#)
6. Ko, Y.C. *et al.* (2009) Endothelial CD200 is heterogeneously distributed, regulated and involved in immune cell-endothelium interactions. [J Anat. 214: 183-95.](#)
7. Koning, N. *et al.* (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. *et al.* (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. *et al.* (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. *et al.* (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. Lago, N. *et al.* (2018) CD200 modulates spinal cord injury neuroinflammation and outcome through CD200R1. [Brain Behav Immun. 73: 416-26.](#)

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

15. 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.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1958B>
10041

Regulatory For research purposes only

Related Products

Recommended Useful Reagents

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

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

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

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