

Datasheet: MCA2281A488T

Description:	RAT ANTI MOUSE CD200R:Alexa Fluor® 488
Specificity:	CD200R
Other names:	OX2R
Format:	ALEXA FLUOR® 488
Product Type:	Monoclonal Antibody
Clone:	OX-110
Isotype:	IgG2a
Quantity:	25 TESTS/0.25ml

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 - 1/2

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 Fusion protein mCD200RCD4d3+4

External Database

Links

UniProt:

[Q9ES57](#) [Related reagents](#)

Entrez Gene:

[57781](#) Cd200r1 [Related reagents](#)

Synonyms

Mox2r, Ox2r

RRID

AB_2074091

Specificity

Rat anti Mouse CD200R antibody, clone OX-110 recognizes mouse CD200R, a cell surface glycoprotein (also known as OX2R. Mouse CD200R is a 326 amino acid, ~48 kDa single pass type I transmembrane glycoprotein, expressed primarily by peripheral blood monocytes and neutrophils but also by other leucocytes including T-lymphocytes and mast cells ([Wright et al.2003](#)). CD200-CD200R interaction may be involved in the control of myeloid cellular function ([Minas and Liversidge 2006](#)).

Rat anti Mouse CD200R antibody, clone OX-110 has been used successfully for the immunohistochemical detection of CD200R expressing cells on acetone fixed cryosections of murine synovial tissue ([Simelyte et al. 2008](#)).

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

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2. Zhao, J. *et al.* (2009) Evasion by stealth: inefficient immune activation underlies poor T cell response and severe disease in SARS-CoV-infected mice. [PLoS Pathog. 5 \(10\): e1000636.](#)
3. Björck, P. *et al.* (2011) Plasmacytoid Dendritic Cell Dichotomy: Identification of IFN- α Producing Cells as a Phenotypically and Functionally Distinct Subset. [J Immunol. 186: 1477-85.](#)
4. Dellacasa-Lindberg, I. *et al.* (2011) Migratory Activation of Primary Cortical Microglia upon Infection with *Toxoplasma gondii*. [Infect Immun. 79: 3046-52.](#)
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7. Costello, D.A. *et al.* (2011) Long term potentiation is impaired in membrane glycoprotein CD200-deficient mice: a role for Toll-like receptor activation. [J Biol Chem. 286 \(40\): 34722-32.](#)
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[Arthritis Rheum. 58: 1038-43.](#)

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13. Hernangómez M *et al.* (2012) CD200-CD200R1 interaction contributes to neuroprotective effects of anandamide on experimentally induced inflammation. [Glia 60 \(9\): 1437-50.](#)

14. Bain, C.C. & Mowat, A.M. (2012) CD200 receptor and macrophage function in the intestine. [Immunobiology 217 \(6\): 643-51.](#)

15. 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.](#)

16. Akkaya, M. *et al.* (2013) Dissection of agonistic and blocking effects of CD200 receptor antibodies. [PLoS One 8 \(5\): e63325.](#)

17. Cassard L *et al.* (2012) Fcγ receptors inhibit mouse and human basophil activation. [J Immunol. 189 \(6\): 2995-3006.](#)

18. Liu, J.Q. *et al.* (2016) A Critical Role for CD200R Signaling in Limiting the Growth and Metastasis of CD200+ Melanoma. [J Immunol. Jul 6. pii: 1600052. \[Epub ahead of print\]](#)

19. Toya, E.E. & Ohba, M. (2015) Improved Long-term Culture of Epidermal Stem Cells Utilizing CD200R-expressing Feeder Cells [Showa Uni J Med Sci 27 \(2\) 83-91.](#)

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/MCA2281A488T>

10041

Regulatory

For research purposes only

Related Products

Recommended Negative Controls

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

North & South Tel: +1 800 265 7376

Worldwide

Tel: +44 (0)1865 852 700

Europe

Tel: +49 (0) 89 8090 95 21

America Fax: +1 919 878 3751

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Email: antibody_sales_de@bio-rad.com

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

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