

Datasheet: MCA2281A647T

Description:	RAT ANTI MOUSE CD200R:Alexa Fluor® 647		
Specificity:	CD200R		
Other names:	OX2R		
Format:	ALEXA FLUOR® 647		
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

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	Mouse			
Product Form	Purified IgG conjugate	Purified IgG conjugated to Alexa Fluor® 647 - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nn	n)
	Alexa Fluor®647	650	665	
Preparation Buffer Solution	Purified IgG prepared supernatant Phosphate buffered sa		raphy on Protein G	from tissue cultur
Preservative Stabilisers	0.09% Sodium Azide 1% Bovine Serum	Albumin		

Immunogen	Fusion protein mCD200RCD4d3+4
External Database Links	UniProt: Q9ES57 Related reagents
	Fature Comp.
	Entrez Gene: 57781 Cd200r1 Related reagents
	<u>37701</u> Cu20011 <u>Ixelated reagents</u>
Synonyms	Mox2r, Ox2r
RRID	AB_1101259
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). Studies suggest that 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 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
	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 (<u>BUF041A/B</u>).
References	1. Wright, G.J. <i>et al.</i> (2003) Characterization of the CD200 receptor family in mice and humans and their interactions with CD200. J Immunol. 171 (6): 3034-46.
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	upon Infection with <i>Toxoplasma gondii</i> . <u>Infect Immun. 79: 3046-52.</u>
	5. Krejsek, J. et al. (2010) Expression of CD200/CD200R regulatory molecules on
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- 8. Simelyte, E. et al. (2008) CD200-Fc, a novel antiarthritic biologic agent that targets

proinflammatory cytokine expression in the joints of mice with collagen-induced arthritis. Arthritis Rheum. 58: 1038-43.

- 9. Whitmore, L.C. *et al.* (2014) NOX2 protects against progressive lung injury and multiple organ dysfunction syndrome. Am J Physiol Lung Cell Mol Physiol. 307: L71-82.
- 10. Chitnis, T. *et al.* (2007) Elevated neuronal expression of CD200 protects Wlds mice from inflammation-mediated neurodegeneration. <u>Am J Pathol. 170: 1695-712.</u>
- 11. Larson, D. *et al.* (2012) Chronic helminth infection reduces basophil responsiveness in an IL-10-dependent manner. <u>J Immunol. 188: 4188-99.</u>
- 12. Torrero, M.N. *et al.* (2009) CD200R surface expression as a marker of murine basophil activation. Clin Exp Allergy. 39 (3): 361-9.
- 13. Hernangómez M *et al.* (2012) CD200-CD200R1 interaction contributes to neuroprotective effects of anandamide on experimentally induced inflammation. <u>Glia 60</u> (9): 1437-50.
- 14. Bain, C.C. & Mowat, A.M. (2012) CD200 receptor and macrophage function in the intestine. <u>Immunobiology 217 (6): 643-51.</u>
- 15. Seeds, R.E. *et al.* (2011) The role of myeloid receptors on murine plasmacytoid dendritic cells in induction of type I interferon. <u>Int Immunopharmacol.</u> 11 (7): 794-801.
- 16. Akkaya, M. *et al.* (2013) Dissection of agonistic and blocking effects of CD200 receptor antibodies. <u>PLoS One 8 (5): e63325.</u>
- 17. Cassard L *et al.* (2012) Fcγ receptors inhibit mouse and human basophil activation. <u>J</u> 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. <u>J Immunol. Jul 6. pii: 1600052</u>. [Epub ahead of print] 19. Toya, E.E. & Ohba, M. (2015) Improved Long-term Culture of Epidermal Stem Cells Utilizing CD200R-expressing Feeder Cells <u>Showa Uni J Med Sci 27 (2) 83-91</u>.

Storage

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.

Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee

12 months from date of despatch

Acknowledgements

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Health And Safety Material Safety Datasheet documentation #10041 available at: Information

10041: https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf

Regulatory For research purposes only

Related Products

Recommended Negative Controls

RAT IgG2a NEGATIVE CONTROL: Alexa Fluor® 647 (MCA1212A647)

Recommended Useful Reagents

MOUSE SEROBLOCK FcR (BUF041A) MOUSE SEROBLOCK FcR (BUF041B)

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