

## Datasheet: MCA2282A647

Description:	MOUSE ANTI HUMAN CD200R:Alexa Fluor® 647
Specificity:	CD200R
Other names:	OX2R
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	OX108
Isotype:	lgG1
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 <u>www.bio-rad-antibodies.com/protocols</u> .							
		Yes	No	Not Determined	Suggested Dilution			
	Flow Cytometry	-			Neat - 1/10			
	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	Human							
Product Form	Purified IgG conjugated to Alexa Fluor® 647 - liquid							
Max Ex/Em	Fluorophore	Excitation Ma	x (nm)	Emission Max (nm)				
	Alexa Fluor®647	650		665				
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant							
Buffer Solution	Phosphate buffered saline							
Preservative Stabilisers	0.09% sodium azide (NaN <sub>3</sub> ) 1% bovine serum albumin							
Approx. Protein Concentrations	IgG concentration 0.05							

## Immunogen Fusion protein hCD200RCD4d3+4. **External Database** UniProt: Links Q8TD46 Related reagents **Entrez Gene:** 131450 CD200R1 Related reagents **Synonyms** CD200R, CRTR2, MOX2R, OX2R RRID AB 566616 Specificity Mouse anti Human CD200R antibody, clone OX108 recognizes human CD200R, a cell surface glycoprotein (also known as OX2R). In humans CD200R is expressed primarily by peripheral blood monocytes and neutrophils but also by other leucocytes including T-lymphocytes and mast cells, CD200-CD200R interaction may be involved in the control of myeloid cellular function (Wright et al. 2003). Levels of expression on resting peripheral blood cells are relatively low. Use 10µl of the suggested working dilution to label 10<sup>6</sup> cells in 100µl Flow Cytometry References 1. Wright, G.J. et al. (2003) Characterization of the CD200 receptor family in mice and humans and their interactions with CD200. J Immunol. 171 (6): 3034-46. 2. 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. 3. Melief, J. et al. (2012) Phenotyping primary human microglia: tight regulation of LPS responsiveness. Glia. 60 (10): 1506-17. 4. Ambarus CA et al. (2012) Soluble immune complexes shift the TLR-induced cytokine production of distinct polarized human macrophage subsets towards IL-10. PLoS One. 7 (4): e35994. 5. Ambarus, C.A. et al. (2012) Intimal lining layer macrophages but not synovial sublining macrophages display an IL-10 polarized-like phenotype in chronic synovitis. Arthritis Res Ther. 14 (2): R74. 6. Vicetti, R.M. et al. (2013) Human female genital tract infection by the obligate intracellular bacterium Chlamydia trachomatis elicits robust Type 2 immunity. PLoS One. 8 (3): e58565.

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are alerted but immunosuppressed. <u>Glia. 61 (11): 1848-61.</u> 8. Vicetti Miguel, R.D. *et al.* (2013) Human female genital tract infection by the obligate intracellular bacterium *Chlamydia trachomatis* elicits robust Type 2 immunity. <u>PLoS One. 8</u> (3): e58565.

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	expression and modulates innate and adaptive activation pathways in macrophages with
	distinct changes in leukocyte attraction. <u>J Immunol. 192 (3): 1196-208.</u>
	11. Sousa, S. et al. (2015) Human breast cancer cells educate macrophages toward the
	M2 activation status. Breast Cancer Res. 17 (1): 101.
	12. Holmannova, D. et al. (2015) Inhibitory CD200R and proapoptotic CD95/CD95L
	molecules on innate immunity cells are modulated by cardiac surgery. <u>Perfusion. 30 (7):</u> 543-55.
	13. Wiedemann, G.M. <i>et al.</i> (2016) A novel TLR7 agonist reverses NK cell anergy and
	cures RMA-S lymphoma-bearing mice. <u>Oncoimmunology. 5 (7): e1189051.</u>
	14. Björnfot Holmström, S. et al. (2017) Gingival Tissue Inflammation Promotes Increased
	Matrix Metalloproteinase-12 Production by CD200R <sup>low</sup> Monocyte-Derived Cells in
	Periodontitis. <u>J Immunol. 199 (12): 4023-35.</u>
	15. Pascoal, M.R. et al. (2022) CD200R1L is a functional evolutionary conserved
	activating receptor in human neutrophils. <u>J Leukoc Biol. 111 (2): 367-77.</u>
	16. Sun, H. et al. (2020) The CD200/CD200R signaling pathway contributes to
	spontaneous functional recovery by enhancing synaptic plasticity after stroke. <u>J</u>
	Neuroinflammation. 17 (1): 171.
	17. van den Bosch, A.M.R. <i>et al.</i> (2024) Cortical CD200-CD200R and CD47-SIRPα
	expression is associated with multiple sclerosis pathology. Brain Commun. 6 (4): fcae264.
	18. Fraser, S.D. et al. (2021) Distinct immune regulatory receptor profiles linked to altered
	monocyte subsets in sarcoidosis. <u>ERJ Open Res.7 (1): 00804-2020.</u>
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
Acknowledgements	This product is provided under an intellectual property licence from Life Technologies
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	product solely in research, excluding contract research or any fee for service research,
	and the buyer must not sell or otherwise transfer this product or its components for (a)
	diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening
	services, or information in return for compensation on a per-test basis; (c) manufacturing
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	as described above, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad
	CA 92008 USA or outlicensing@thermofisher.com
Health And Safety	Material Safety Datasheet documentation #10041 available at:
Information	https://www.bio-rad-antibodies.com/SDS/MCA2282A647
	10041

Relate	d Products							
Recommended Negative Controls								
MOUSE IgG1 NEGATIVE CONTROL: Alexa Fluor® 647 (MCA928A647)								
Recommended Useful Reagents								
	EROBLOCK (BUF070A EROBLOCK (BUF070B	*						
North & South	Tel: +1 800 265 7376	Worldwide	Tel: +44 (0)1865 852 700	Europe	Tel: +49 (0) 89 8090 95 21			
America				Fax: +49 (0) 89 8090 95 50				
	Email: antibody_sales_us@bi	o-rad.com	Email: antibody_sales_uk@bio	-rad.com	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 'M429713:240416'								
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