

Datasheet: MCA2281GA

Description:	RAT ANTI MOUSE CD200R			
Specificity:	CD200R			
Other names:	OX2R			
Format:	Purified			
Product Type:	Monoclonal Antibody			
Clone:	OX-110			
Isotype:	lgG2a			
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 <u>www.bio-</u>
	rad-antibodies.com/protocols.

		Yes	No	Not Determined	Suggested Dilution	
	Flow Cytometry	-			1/25 - 1/50	
	Immunohistology - Frozen			•		
	Immunohistology - Paraffin			•		
	ELISA			•		
	Immunoprecipitation			•		
	Western Blotting			•		
	Where this product has n	product has not been tested for use in a particular technique this does not				
	necessarily exclude its us	sarily exclude its use in such procedures. Suggested working dilutions are given as				
	a guide only. It is recomn	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 - liquid					
Preparation	Purified IgG prepared by affinity chromatography on Protein G supernatant			aphy on Protein G fi	rom tissue culture	
Buffer Solution	Phosphate buffered saline					
Preservative Stabilisers	0.09% sodium azide (Na	N ₃)				

Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Fusion protein mCD200RCD4d3+4
External Database Links	UniProt: <u>Q9ES57</u> <u>Related reagents</u> Entrez Gene: <u>57781</u> Cd200r1 <u>Related reagents</u>
Synonyms	Mox2r, Ox2r
RRID	AB_566623
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 <i>et al.</i> 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 <i>et al.</i> 2008).
Flow Cytometry	
	Use 10µl of the suggested working dilution to label 10 ⁶ cells in 100µl

<u>34722-32.</u> 8 Simelyte

	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. Am J Pathol. 170: 1695-712.
	11. Larson, D. <i>et al.</i> (2012) Chronic helminth infection reduces basophil responsiveness in
	an IL-10-dependent manner. J Immunol. 188: 4188-99.
	12. Torrero, M.N. <i>et al.</i> (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. 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. <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.
	16. Akkaya, M. <i>et al.</i> (2013) Dissection of agonistic and blocking effects of CD200
	receptor antibodies. <u>PLoS One 8 (5): e63325.</u>
	17. Cassard L <i>et al.</i> (2012) Fcγ receptors inhibit mouse and human basophil activation. J
	Immunol. 189 (6): 2995-3006.
	18. Liu, J.Q. <i>et al.</i> (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 <u>Showa Uni J Med Sci 27 (2) 83-91.</u>
	20. Lago, N. <i>et al.</i> (2018) CD200 modulates spinal cord injury neuroinflammation and
	outcome through CD200R1. Brain Behav Immun. 73: 416-26.
	21. Qian, H. <i>et al.</i> (2023) Activation of the CD200/CD200R1 axis attenuates
	neuroinflammation and improves postoperative cognitive dysfunction via the PI3K/Akt
	/NF-κB signaling pathway in aged mice. Inflamm Res. 72 (12): 2127-44.
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	Material Safety Datasheet documentation #10040 available at:
Information	https://www.bio-rad-antibodies.com/SDS/MCA2281GA
	10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit A	nti Rat IgG (STAR16)		DyLight®800				
Rabbit Anti Rat IgG (STAR17)			<u>FITC</u>	<u>FITC</u>			
Goat Anti Rat IgG (STAR72)			<u>HRP</u>	HRP			
Goat Ant	Goat Anti Rat IgG (STAR69) <u>FITC</u>						
Goat Ant	Goat Anti Rat IgG (STAR73) RPE						
Rabbit A	Rabbit Anti Rat IgG (STAR21) HRP						
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71) <u>DyLight®550</u> , <u>DyLight®650</u> , <u>DyLight®800</u>							
Goat Anti Rat IgG (STAR131) <u>Alk. Phos.</u> , <u>Biotin</u>							
Recommended Negative Controls							
RAT IgG2a NEGATIVE CONTROL (MCA1212)							
North & South	Tel: +1 800 265 7376	Worldwide	Tel: +44 (0)1865 852 700	Europe	Tel: +49 (0) 89 8090 95 21		
		Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-	rad.com	Fax: +49 (0) 89 8090 95 50 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 'M413938:221129'

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