

Datasheet: MCA1958FT

Description:	RAT ANTI MOUSE CD200:FITC
Specificity:	CD200
Other names:	OX2
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	OX-90
lsotype:	lgG2a
Quantity:	25 µg

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 - 1/5		
	Where this product has	s not been test	ed for	use in a particular te	chnique 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 Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid						
Max Ex/Em	Fluorophore FITC	Excitation Ma 490	k (nm)	Emission Max (nm) 525	-		
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant						
Buffer Solution	Phosphate buffered saline						
Preservative Stabilisers	0.09% sodium azide (NaN ₃) 1% bovine serum albumin						
Approx. Protein Concentrations	IgG concentration 0.1mg/ml						

Immunogen	Mouse CD200-rat CD4 fusion protein.
External Database Links	UniProt: <u>O54901</u> <u>Related reagents</u> Entrez Gene: <u>17470</u> Cd200 <u>Related reagents</u>
Synonyms	Mox2
RRID	AB_2073827
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 10 ⁶ 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 (<u>BUF041A/BUF041B</u>).
References	 Hoek, R.M. <i>et al.</i> (2000) Down-regulation of the macrophage lineage through interaction with OX2 (CD200). Science. 290 (5497): 1768-71. Nathan, C. & Muller, W.A. (2001) Putting the brakes on innate immunity: a regulatory role for CD200? Nat Immunol. 2 (1): 17-9. Rijkers, E.S. (2007) Ligation of CD200R by CD200 is not required for normal murine myelopoiesis. Eur J Haematol. 79: 410-6. Rijkers, E.S. <i>et al.</i> (2008) The inhibitory CD200R is differentially expressed on human and mouse T and B lymphocytes. Mol Immunol. 45: 1126-35. Burger, P.E. <i>et al.</i> (2009) High aldehyde dehydrogenase activity: a novel functional marker of murine prostate stem/progenitor cells. Stem Cells. 27: 2220-8. Ko, Y.C. <i>et al</i> (2009) Endothelial CD200 is heterogeneously distributed, regulated and involved in immune cell-endothelium interactions. J Anat. 214: 183-95. Koning, N. <i>et al.</i> (2001) 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. 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. Garza, L.A. <i>et al.</i> (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 Growt					
	Metastasis of CD200+ Melanoma. <u>J Immunol. 197 (4): 1489-97.</u>					
	12. Liu, C. et al. (2018) The role of N-glycosylation of CD200-CD200R1 interaction in					
	classical microglial activation. <u>J Inflamm (Lond). 15: 28.</u>					
	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. <i>et al.</i> (2021) The CD200 Regulates Inflammation in Mice Independently of TNE a Draduction. Int J Mol Sci. 22 (10): 5259					
	TNF-α Production. Int J Mol Sci. 22 (10): 5358.					
	15. Pannunzio, B. <i>et al.</i> (2022) CD200R1 Contributes to Successful Functional					
	Reinnervation after a Sciatic Nerve Injury <u>Cells. 11 (11): 1786.</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					
Health And Safety	Material Safety Datasheet documentation #10041 available at:					
Information	https://www.bio-rad-antibodies.com/SDS/MCA1958FT 10041					
Regulatory	For research purposes only					

Related Products

Recommended Negative Controls

RAT IgG2a NEGATIVE CONTROL:FITC (MCA1212F)

Recommended Useful Reagents

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

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		Fax: +44 (0)1865 852 739		Fax: +49 (0) 89 8090 95 50
	Email: antibody_sales_us@bio-ra	d.com	Email: antibody_sales_uk@bio-ra	d.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 'M412323:221110'

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