

Datasheet: MCA1958EL

Description:	RAT ANTI MOUSE CD200:Low Endotoxin
Specificity:	CD200
Other names:	OX2
Format:	Low Endotoxin
Product Type:	Monoclonal Antibody
Clone:	OX-90
Isotype:	IgG2a
Quantity:	0.5 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 www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/10 - 1/50
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA	▪			
Immunoprecipitation			▪	
Western Blotting			▪	

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 - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	None present

Carrier Free	Yes
Endotoxin Level	<0.01EU/μg
Approx. Protein Concentrations	IgG concentration 1.0mg/ml
Immunogen	Mouse CD200-rat CD4 fusion protein.
External Database Links	<p>UniProt:</p> <p>O54901 Related reagents</p> <p>Entrez Gene:</p> <p>17470 Cd200 Related reagents</p>
Synonyms	Mox2
RRID	AB_10614175
Fusion Partners	Spleen cells from immunised rats were fused with cells of the rat Y3 myeloma cell line
Specificity	<p>Rat anti Mouse CD200 antibody, clone OX-90 recognizes the mouse CD200 cell surface antigen, also known as OX2.</p> <p>CD200 is expressed by splenic B lymphocytes, follicular dendritic cells, splenic endothelium and by neurons.</p> <p>The CD200 - CD200 ligand system is of importance in the control of macrophage and granulocyte activation.</p>
Flow Cytometry	Use 10μl of the suggested working dilution to label 10 ⁶ cells in 100μl
Histology Positive Control Tissue	Mouse spleen
References	<ol style="list-style-type: none"> 1. Hoek, R.M. <i>et al.</i> (2000) Down-regulation of the macrophage lineage through interaction with OX2 (CD200). Science. 290 (5497): 1768-71. 2. Nathan, C. & Muller, W.A. (2001) Putting the brakes on innate immunity: a regulatory role for CD200? Nat Immunol. 2 (1): 17-9. 3. Rijkers, E.S. (2007) Ligation of CD200R by CD200 is not required for normal murine myelopoiesis. Eur J Haematol. 79: 410-6. 4. 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. 5. 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. 6. 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. 7. Koning, N. <i>et al.</i> (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.](#)

8. 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.](#)

9. Garza, L.A. *et al.* (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 Growth and Metastasis of CD200+ Melanoma. [J Immunol. 197 \(4\): 1489-97.](#)

12. Liu, C. *et al.* (2018) The role of N-glycosylation of CD200-CD200R1 interaction in classical microglial activation. [J Inflamm \(Lond\). 15: 28.](#)

13. Tonecka, K. *et al.* (2021) The CD200 Regulates Inflammation in Mice Independently of TNF- α Production. [Int J Mol Sci. 22 \(10\): 5358.](#)

14. Pannunzio, B. *et al.* (2022) CD200R1 Contributes to Successful Functional Reinnervation after a Sciatic Nerve Injury [Cells. 11 \(11\): 1786.](#)

Storage	Store at -20°C only. Storage in frost-free freezers is not recommended. This product should be stored undiluted. 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
Health And Safety Information	Material Safety Datasheet documentation #10162 available at: https://www.bio-rad-antibodies.com/SDS/MCA1958EL 10162
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (STAR72...)	HRP
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight®550 , DyLight®650 , DyLight®800
Rabbit Anti Rat IgG (STAR21...)	HRP
Rabbit Anti Rat IgG (STAR16...)	DyLight®800
Goat Anti Rat IgG (STAR131...)	Alk. Phos. , Biotin

Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL:Low Endotoxin \(MCA1212EL\)](#)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

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