

Datasheet: MCA1959

BATCH NUMBER 174351

Description:	MOUSE ANTI RAT CD200 RECEPTOR 1
Specificity:	CD200 RECEPTOR 1
Other names:	OX2 RECEPTOR 1
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	OX-102
Isotype:	IgG1
Quantity:	0.25 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	▪			1/100 - 1/200
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	Rat
Product Form	Purified IgG - liquid
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 ₃)

Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0mg/ml
Immunogen	Membrane fraction of thioglycollate-elicited rat peripheral cells.
External Database Links	UniProt: Q9ES58 Related reagents Entrez Gene: 64357 Cd200r1 Related reagents
Synonyms	Mox2r, Ox2r
RRID	AB_2074188
Fusion Partners	Spleen cells from immunised Balb/c mice were fused with cells of the mouse NS1 myeloma cell line.
Specificity	Mouse anti Rat CD200 Receptor 1 antibody, clone OX-102 recognizes the rat OX2 (CD200) receptor 1. This antigen is a heavily glycosylated ~60-100 kDa cell surface molecule expressed by cells of the myeloid lineage but not by T or B lymphocytes. Mouse anti Rat CD200 Receptor 1 antibody, clone OX-102 has been shown to block the interaction of OX2 receptor 1 with CD200 (Bushell et al. 2008).
Flow Cytometry	Use 10µl of the suggested working dilution to label 10 ⁶ cells in 100µl
References	- Nathan, C. & Muller, W.A. (2001) Putting the brakes on innate immunity: a regulatory role for CD200? Nat Immunol. 2 (1): 17-9. - Dick, A.D. et al. (2001) Distribution of OX2 antigen and OX2 receptor within retina. Invest Ophthalmol Vis Sci. 42 (1): 170-6. - Banerjee, D. & Dick, A.D. (2004) Blocking CD200-CD200 receptor axis augments NOS-2 expression and aggravates experimental autoimmune uveoretinitis in Lewis rats. Ocul Immunol Inflamm. 12 (2): 115-25. - Meuth, S.G. et al. (2008) CNS inflammation and neuronal degeneration is aggravated by impaired CD200-CD200R-mediated macrophage silencing. J Neuroimmunol. 194 (1-2): 62-9. - Matsumoto, S. et al. (2015) CD200+ and CD200- macrophages accumulated in ischemic lesions of rat brain: the two populations cannot be classified as either M1 or M2 macrophages. J Neuroimmunol. 282: 7-20. - Nicholls, S.M. et al. (2015) Local targeting of the CD200-CD200R axis does not promote corneal graft survival. Exp Eye Res. 130: 1-8. - Xie, X. et al. (2017) Monocytes, microglia, and CD200-CD200R1 signaling are essential in the transmission of inflammation from the periphery to the central nervous system. J Neurochem. 141 (2): 222-35.

8. Chang, J.C. *et al.* (2019) Early Immune Response to Acute Gastric Fluid Aspiration in a Rat Model of Lung Transplantation. [Exp Clin Transplant. 17 \(1\): 84-92.](#)
9. Qian, H. *et al.* (2024) Activation of the CD200/CD200R1 axis improves cognitive impairment by enhancing hippocampal neurogenesis via suppression of M1 microglial polarization and neuroinflammation in hypoxic-ischemic neonatal rats. [Int Immunopharmacol. 128: 111532.](#)

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 Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA1959
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight®488 , DyLight®550 , DyLight®650 , DyLight®680 , DyLight®800 , FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA1209\)](#)

Product inquiries: www.bio-rad-antibodies.com/technical-support

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M412330:221110'

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