

## Datasheet: MCA2281

<b>Description:</b>	RAT ANTI MOUSE CD200R
<b>Specificity:</b>	CD200R
<b>Other names:</b>	OX2R
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	OX-110
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	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](http://www.bio-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 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.

<b>Target Species</b>	Mouse
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% sodium azide (NaN <sub>3</sub> )

<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Fusion protein mCD200RCD4d3+4
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">Q9ES57</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">57781</a> Cd200r1    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	Mox2r, Ox2r
<b>RRID</b>	AB_566622
<b>Specificity</b>	<p><b>Rat anti Mouse CD200R antibody, clone OX-110</b> 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 (<a href="#">Wright et al.2003</a>). CD200-CD200R interaction may be involved in the control of myeloid cellular function (<a href="#">Minas and Liversidge 2006</a>).</p> <p>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 (<a href="#">Simelyte et al. 2008</a>).</p>
<b>Flow Cytometry</b>	Use 10µl of the suggested working dilution to label 10 <sup>6</sup> cells in 100µl
<b>References</b>	<ol style="list-style-type: none"> <li>1. Wright, G.J. <i>et al.</i> (2003) Characterization of the CD200 receptor family in mice and humans and their interactions with CD200. <a href="#">J Immunol. 171 (6): 3034-46.</a></li> <li>2. Zhao, J. <i>et al.</i> (2009) Evasion by stealth: inefficient immune activation underlies poor T cell response and severe disease in SARS-CoV-infected mice. <a href="#">PLoS Pathog. 5 (10): e1000636.</a></li> <li>3. Björck, P. <i>et al.</i> (2011) Plasmacytoid Dendritic Cell Dichotomy: Identification of IFN-<math>\alpha</math> Producing Cells as a Phenotypically and Functionally Distinct Subset. <a href="#">J Immunol. 186: 1477-85.</a></li> <li>4. Dellacasa-Lindberg, I. <i>et al.</i> (2011) Migratory Activation of Primary Cortical Microglia upon Infection with <i>Toxoplasma gondii</i>. <a href="#">Infect Immun. 79: 3046-52.</a></li> <li>5. Krejsek, J. <i>et al.</i> (2010) Expression of CD200/CD200R regulatory molecules on granulocytes and monocytes is modulated by cardiac surgical operation. <a href="#">Perfusion 25: 389-97.</a></li> <li>6. Rijkers, E.S. <i>et al.</i> (2008) The inhibitory CD200R is differentially expressed on human and mouse T and B lymphocytes. <a href="#">Mol Immunol. 45: 1126-35.</a></li> <li>7. Costello, D.A. <i>et al.</i> (2011) Long term potentiation is impaired in membrane glycoprotein CD200-deficient mice: a role for Toll-like receptor activation. <a href="#">J Biol Chem. 286 (40):</a></li> </ol>

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12. Torrero, M.N. *et al.* (2009) CD200R surface expression as a marker of murine basophil activation. [Clin Exp Allergy. 39 \(3\): 361-9.](#)
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15. 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.](#)
16. Akkaya, M. *et al.* (2013) Dissection of agonistic and blocking effects of CD200 receptor antibodies. [PLoS One 8 \(5\): e63325.](#)
17. Cassard L *et al.* (2012) Fcγ receptors inhibit mouse and human basophil activation. [J Immunol. 189 \(6\): 2995-3006.](#)
18. Liu, J.Q. *et al.* (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 [Showa Uni J Med Sci 27 \(2\) 83-91.](#)

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**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.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2281>  
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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Goat Anti Rat IgG (STAR69...)

[FITC](#)

Goat Anti Rat IgG (STAR73...)	<a href="#">RPE</a>
Rabbit Anti Rat IgG (STAR17...)	<a href="#">FITC</a>
Goat Anti Rat IgG (STAR72...)	<a href="#">HRP</a>
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	<a href="#">DyLight@550</a> , <a href="#">DyLight@650</a> , <a href="#">DyLight@800</a>
Rabbit Anti Rat IgG (STAR21...)	<a href="#">HRP</a>
Rabbit Anti Rat IgG (STAR16...)	<a href="#">DyLight@800</a>
Goat Anti Rat IgG (STAR131...)	<a href="#">Alk. Phos.</a> , <a href="#">Biotin</a>

### Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL \(MCA1212\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://bio-rad-antibodies.com/datasheets)  
'M413937:221129'

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