

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 |
|-------------------|--|
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| | 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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