# Datasheet: MCA2282A488T

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| **Description:** | MOUSE ANTI HUMAN CD200R:Alexa Fluor® 488 |
| **Specificity:** | CD200R |
| **Other names:** | OX2R |
| **Format:** | ALEXA FLUOR® 488 |
| **Product Type:** | Monoclonal Antibody |
| **Clone:** | OX108 |
| **Isotype:** | IgG1 |
| **Quantity:** | 25 TESTS/0.25ml |

## 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 | ▪ | | | Neat |

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**

Human

**Product Form**

Purified IgG conjugated to Alexa Fluor® 488 - liquid

**Max Ex/Em**

| Fluorophore | Excitation Max (nm) | Emission Max (nm) |
|---|---|---|
| Alexa Fluor®488 | 495 | 519 |

**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 ($NaN_3$)
1% bovine serum albumin

**Approx. Protein Concentrations**

IgG concentration 0.05 mg/ml

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| **Immunogen** | Fusion protein hCD200RCD4d3+4. |
| **External Database Links** | **UniProt:**<br>Q8TD46 Related reagents<br><br>**Entrez Gene:**<br>131450 CD200R1 Related reagents |
| **Synonyms** | CD200R, CRTR2, MOX2R, OX2R |
| **RRID** | AB_1101244 |
| **Specificity** | **Mouse anti Human CD200R antibody, clone OX108** recognizes human CD200R, a cell surface glycoprotein (also known as OX2R). In humans CD200R is expressed primarily by peripheral blood monocytes and neutrophils but also by other leucocytes including T-lymphocytes and mast cells, CD200-CD200R interaction may be involved in the control of myeloid cellular function (Wright *et al.* 2003).<br><br>Levels of expression on resting peripheral blood cells are relatively low. |
| **Flow Cytometry** | Use 10µl of the suggested working dilution to label $10^6$ cells in 100µl |
| **References** | 1. Wright, G.J. *et al.* (2003) Characterization of the CD200 receptor family in mice and humans and their interactions with CD200. J Immunol. 171 (6): 3034-46.<br>2. Koning, N. *et al.* (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.<br>3. Melief, J. *et al.* (2012) Phenotyping primary human microglia: tight regulation of LPS responsiveness. Glia. 60 (10): 1506-17.<br>4. Ambarus CA *et al.* (2012) Soluble immune complexes shift the TLR-induced cytokine production of distinct polarized human macrophage subsets towards IL-10. PLoS One. 7 (4): e35994.<br>5. Ambarus, C.A. *et al.* (2012) Intimal lining layer macrophages but not synovial sublining macrophages display an IL-10 polarized-like phenotype in chronic synovitis. Arthritis Res Ther. 14 (2): R74.<br>6. Vicetti, R.M. *et al.* (2013) Human female genital tract infection by the obligate intracellular bacterium<br>Chlamydia trachomatis<br>elicits robust Type 2 immunity. PLoS One. 8 (3): e58565.<br>7. Melief, J. *et al.* (2013) Microglia in normal appearing white matter of multiple sclerosis are alerted but immunosuppressed. Glia. 61 (11): 1848-61.<br>8. Vicetti Miguel, R.D. *et al.* (2013) Human female genital tract infection by the obligate intracellular bacterium *Chlamydia trachomatis* elicits robust Type 2 immunity. PLoS One. 8 (3): e58565.<br>9. Memarian, A. *et al.* (2013) Upregulation of CD200 is associated with Foxp3+ regulatory T cell expansion and disease progression in acute myeloid leukemia. Tumour Biol. 34 (1): 531-42. |

10. van de Garde, M.D. *et al.* (2014) Chronic exposure to glucocorticoids shapes gene expression and modulates innate and adaptive activation pathways in macrophages with distinct changes in leukocyte attraction. J Immunol. 192 (3): 1196-208.
11. Sousa, S. *et al.* (2015) Human breast cancer cells educate macrophages toward the M2 activation status. Breast Cancer Res. 17 (1): 101.
12. Holmannova, D. *et al.* (2015) Inhibitory CD200R and proapoptotic CD95/CD95L molecules on innate immunity cells are modulated by cardiac surgery. Perfusion. 30 (7): 543-55.
13. Wiedemann, G.M. *et al.* (2016) A novel TLR7 agonist reverses NK cell anergy and cures RMA-S lymphoma-bearing mice. Oncoimmunology. 5 (7): e1189051.
14. Björnfot Holmström, S. *et al.* (2017) Gingival Tissue Inflammation Promotes Increased Matrix Metalloproteinase-12 Production by CD200R$^{low}$ Monocyte-Derived Cells in Periodontitis. J Immunol. 199 (12): 4023-35.
15. Pascoal, M.R. *et al.* (2022) CD200R1L is a functional evolutionary conserved activating receptor in human neutrophils. J Leukoc Biol. 111 (2): 367-77.

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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.<br><br>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 |
| **Acknowledgements** | This product is provided under an intellectual property licence from Life Technologies Corporation. The transfer of this product is contingent on the buyer using the purchase product solely in research, excluding contract research or any fee for service research, and the buyer must not sell or otherwise transfer this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; (c) manufacturing or quality assurance or quality control, or (d) resale, whether or not resold for use in research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad CA 92008 USA or outlicensing@thermofisher.com |
| **Health And Safety Information** | Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA2282A488T<br>10041 |
| **Regulatory** | For research purposes only |

## Related Products

### Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 488 (MCA928A488)

## Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A)
HUMAN SEROBLOCK (BUF070B)


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| **North & South America** | Tel: +1 800 265 7376<br>Fax: +1 919 878 3751<br>Email: antibody_sales_us@bio-rad.com | **Worldwide** | Tel: +44 (0)1865 852 700<br>Fax: +44 (0)1865 852 739<br>Email: antibody_sales_uk@bio-rad.com | **Europe** | Tel: +49 (0) 89 8090 95 21<br>Fax: +49 (0) 89 8090 95 50<br>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

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