# Datasheet: MCA2305F

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| **Description:** | RAT ANTI MOUSE CD16/CD32:FITC |
| **Specificity:** | CD16/CD32 |
| **Other names:** | MOUSE SEROBLOCK FcR |
| **Format:** | FITC |
| **Product Type:** | Monoclonal Antibody |
| **Clone:** | FCR4G8 |
| **Isotype:** | IgG2b |
| **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 www.bio-rad-antibodies.com/protocols.

| | Yes | No | Not Determined | Suggested Dilution |
|---|---|---|---|---|
| Flow Cytometry | ▪ | | | Neat - 1/10 |

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 conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid

**Max Ex/Em**

| Fluorophore | Excitation Max (nm) | Emission Max (nm) |
|---|---|---|
| FITC | 490 | 525 |

**Preparation**

Purified IgG prepared by affinity chromatography on Protein G 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 0.1 mg/ml

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| **Immunogen** | PU5 1.8 IOE7 Balb/c mouse cell line. |
| **External Database Links** | **UniProt:**<br>P08508 Related reagents<br>P08101 Related reagents<br><br>**Entrez Gene:**<br>14131 Fcgr3 Related reagents<br>14130 Fcgr2b Related reagents |
| **Synonyms** | Fcgr2b, Ly-17 |
| **RRID** | AB_566552 |
| **Fusion Partners** | Cells from immunised rats were fused with cells of the mouse P3X63-Ag8.653 myeloma cell line. |
| **Specificity** | **Rat anti Mouse CD16/CD32 antibody, clone FCR4G8** recognizes an epitope expressed by the murine low affinity Fc receptors, Fc gamma III (CD16) and Fc gamma II (CD32). In the mouse only the transmembrane form of CD16 is reported to exist, which is expressed on macrophages, NK cells, granulocytes, myeloid precursors, and subpopulations of T lymphocytes. CD32 is primarily expressed on cells of the myeloid lineage and also on mature B lymphocytes. |
| **Flow Cytometry** | Use 10µl of the suggested working dilution to label $10^6$ cells in 100µl |

**References**


1. Hart, R. & Greaves, D.R. (2010) Chemerin contributes to inflammation by promoting macrophage adhesion to VCAM-1 and fibronectin through clustering of VLA-4 and VLA-5. J Immunol. 185 (6): 3728-39.
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3. Birjandi, S.Z. *et al.* (2011) Alterations in marginal zone macrophages and marginal zone B cells in old mice. J Immunol. 186 (6): 3441-51.
4. Lunnon, K. *et al.* (2011) Systemic inflammation modulates Fc receptor expression on microglia during chronic neurodegeneration. J Immunol. 186 (12): 7215-24.
5. Birjandi, S.Z. *et al.* (2011) Alterations in marginal zone macrophages and marginal zone B cells in old mice. J Immunol. 186: 3441-51.
6. Hart, A.D. *et al.* (2012) Age related changes in microglial phenotype vary between CNS regions: grey versus white matter differences. Brain Behav Immun. 26 (5): 754-65.
7. Teeling, J.L. *et al.* (2012) Intracerebral immune complex formation induces inflammation in the brain that depends on Fc receptor interaction. Acta Neuropathol. 124 (4): 479-90.
8. Jones, D.T. *et al.* (2013) Endogenous ribosomal protein L29 (RPL29): a newly identified regulator of angiogenesis in mice. Dis Model Mech. 6: 115-24.
9. Murinello, S. *et al.* (2014) Fcγ receptor upregulation is associated with immune complex inflammation in the mouse retina and early age-related macular degeneration. Invest Ophthalmol Vis Sci. 55 (1): 247-58.
10. Kapellos, T.S. *et al.* (2016) A novel real time imaging platform to quantify macrophage

phagocytosis. Biochem Pharmacol. 116: 107-19.
11. Ahmed, N. *et al.* (2022) Blood stem cell PU.1 upregulation is a consequence of differentiation without fast autoregulation. J Exp Med. 219 (1): e20202490.

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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 |
| **Health And Safety Information** | Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA2305F<br>10041 |
| **Regulatory** | For research purposes only |

## Related Products

### Recommended Useful Reagents

MOUSE SEROBLOCK FcR (BUF041A)
MOUSE SEROBLOCK FcR (BUF041B)

**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

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M414332:221206'

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