

## Datasheet: MCA2537PE

**BATCH NUMBER 162398**

<b>Description:</b>	MOUSE ANTI HUMAN CD16:RPE
<b>Specificity:</b>	CD16
<b>Other names:</b>	FcRIII
<b>Format:</b>	RPE
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	DJ130c
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	100 TESTS

### 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	▪			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

Human

#### Species Cross Reactivity

Reacts with: Macaque

**N.B.** Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

#### Product Form

Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized

#### Reconstitution

Reconstitute with 1.0ml distilled water

#### Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
RPE 488nm laser	496	578

#### Preparation

Purified IgG prepared by affinity chromatography on Protein A from tissue culture

supernatant

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**Buffer Solution** Phosphate buffered saline

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**Preservative** 0.09% Sodium Azide (NaN<sub>3</sub>)  
**Stabilisers** 1% Bovine Serum Albumin  
5% Sucrose

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**External Database Links**

**UniProt:**

[P08637](#) [Related reagents](#)

[O75015](#) [Related reagents](#)

**Entrez Gene:**

[2214](#) FCGR3A [Related reagents](#)

[2215](#) FCGR3B [Related reagents](#)

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**Synonyms** CD16A, CD16B, FCG3, FCGR3, IGFR3

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**RRID** AB\_961449

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**Specificity** **Mouse anti Human CD16 antibody, clone DJ130c** recognizes human CD16, also known as Low affinity immunoglobulin gamma Fc region receptor III-A or Fc-gamma RIIIa. CD16a is a 254 amino acid ~50-65 kDa single pass type 1 transmembrane glycoprotein bearing two [Ig-like C2 type](#) domains. CD16 exists as a transmembranous form (Fc gammaRIIIA, or CD16A) and a glycosyl phosphatidylinositol (GPI) anchored form, Fc gammaRIIIB, or CD16B ([Scallon et al. 1989](#)). CD16A is expressed by NK cells, some T cells, and macrophages, whereas CD16B is primarily expressed by granulocytes ([Ravetch and Perussia 1989](#)). In addition, CD16B exists as two allelic variants NA1 and NA2 . DJ130c recognizes all polymorphonuclear cells irrespective of their NA phenotype.

Mouse anti Human CD16 antibody, clone DJ130c recognizes an epitope in the first membrane-distal domain of CD16, recognizes both CD16a and CD16b and has been demonstrated to cross-react with CD16 from rhesus macaques, *Macaca mulatta* ([Xu et al. 2012](#))

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**Flow Cytometry** Use 10ul of the suggested working dilution to label 1x10<sup>6</sup> cells in 100ul.

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**References**

- Schmidt, R.E. (1993) CD16 cluster workshop report. In Leucocyte Typing V: White cell differentiation antigens, Vol.1. Edited by Schlossman, S.F. et al. Oxford University Press. p805 – 806.
- Kakko, T. et al. (2011) Inflammatory effects of blood leukocytes: association with vascular function in neuropeptide Y proline 7-genotyped type 2 diabetes patients. [Diab Vasc Dis Res. 8: 221-8.](#)
- Shantsila, E. et al. (2012) Fibrinolytic status in acute coronary syndromes: evidence of differences in relation to clinical features and pathophysiological pathways. [Thromb Haemost. 108: 32-40.](#)

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5. Tapp, L.D. *et al.* (2012) The CD14<sup>++</sup>CD16<sup>+</sup> monocyte subset and monocyte-platelet interactions in patients with ST-elevation myocardial infarction. [J Thromb Haemost. 10: 1231-41.](#)
6. 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: R74.](#)
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9. Shantsila, E. *et al.* (2012) The effects of exercise and diurnal variation on monocyte subsets and monocyte-platelet aggregates. [Eur J Clin Invest. 42: 832-9.](#)
10. Chehadeh, W. *et al.* (2009) Antibody-mediated opsonization of red blood cells in parvovirus B19 infection. [Virology. 390: 56-63.](#)
11. Wrigley, B.J. *et al.* (2013) Increased formation of monocyte-platelet aggregates in ischemic heart failure. [Circ Heart Fail. 6: 127-35.](#)
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13. Shantsila, E. *et al.* (2015) Free Light Chains in patients with acute coronary syndromes: Relationships to inflammation and renal function. [Int J Cardiol. 185: 322-7.](#)
14. Wrigley, B.J. *et al.* (2013) Increased formation of monocyte-platelet aggregates in ischemic heart failure. [Circ Heart Fail. 6 \(1\): 127-35.](#)
15. Romee R *et al.* (2013) NK cell CD16 surface expression and function is regulated by a disintegrin and metalloprotease-17 (ADAM17). [Blood. 121 \(18\): 3599-608.](#)
16. Sousa, S. *et al.* (2015) Human breast cancer cells educate macrophages toward the M2 activation status. [Breast Cancer Res. 17: 101.](#)
17. Shantsila, E. *et al.* (2019) Mon2 predicts poor outcome in ST-elevation myocardial infarction. [J Intern Med. 285 \(3\): 301-16.](#)
18. Brown, R.A. *et al.* (2018) Impact of Mon2 monocyte-platelet aggregates on human coronary artery disease. [Eur J Clin Invest. 48 \(5\): e12911.](#)

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**Storage**

Store at +4°C.  
 DO NOT FREEZE.  
 Storage in frost-free freezers is not recommended.  
 This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody.  
 This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.

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**Guarantee**

12 months from date of despatch

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**Health And Safety Information**

Material Safety Datasheet documentation #20487 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2537PE>

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**Regulatory**

For research purposes only

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## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA928PE\)](#)

### Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto: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](mailto: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](mailto: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](https://bio-rad-antibodies.com/datasheets)

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