

Datasheet: MCA2537PE

Description:	MOUSE ANTI HUMAN CD16:RPE
Specificity:	CD16
Other names:	FcRIII
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	DJ130c
Isotype:	IgG1
Quantity:	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.

	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.								
Product Form	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized								
Reconstitution	Reconstitute with 1.0ml distilled water								
Max Ex/Em	<table border="1"> <thead> <tr> <th>Fluorophore</th> <th>Excitation Max (nm)</th> <th>Emission Max (nm)</th> </tr> </thead> <tbody> <tr> <td>RPE 488nm laser</td> <td>496</td> <td>578</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	RPE 488nm laser	496	578		
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								
Buffer Solution	Phosphate buffered saline								
Preservative	0.09% Sodium Azide (NaN ₃)								
Stabilisers	1% Bovine Serum Albumin 5% Sucrose								
External Database Links	UniProt: P08637 Related reagents								

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

Entrez Gene:

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

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

Synonyms CD16A, CD16B, FCG3, FCGR3, IGFR3

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 ([Scallan 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](#))

Flow Cytometry Use 10ul of the suggested working dilution to label 1×10^6 cells in 100ul.

- 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.](#)
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 - 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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and carotid stenosis. [Ann Med. 11: 1-9.](#)

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.](#)

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.
Shelf Life	18 months from date of reconstitution.
Health And Safety Information	Material Safety Datasheet documentation #10075 available at: 10075: https://www.bio-rad-antibodies.com/uploads/MSDS/10075.pdf
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

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

Recommended Useful Reagents

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

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

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