

Datasheet: MCA2537

**BATCH NUMBER 152020**

<b>Description:</b>	MOUSE ANTI HUMAN CD16
<b>Specificity:</b>	CD16
<b>Other names:</b>	FcRIII
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	DJ130c
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.2 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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/50 - 1/200
Immunohistology - Frozen	▪			
Immunohistology - Paraffin (1)	▪			
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	

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.

**(1) This product requires antigen retrieval using heat treatment prior to staining of paraffin sections. Sodium citrate buffer pH 6.0 is recommended for this purpose.**

### 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.

<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> )
<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0mg/ml
<b>External Database Links</b>	<p><b>UniProt:</b></p> <p><a href="#">P08637</a>      <a href="#">Related reagents</a></p> <p><a href="#">O75015</a>      <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b></p> <p><a href="#">2214</a> FCGR3A      <a href="#">Related reagents</a></p> <p><a href="#">2215</a> FCGR3B      <a href="#">Related reagents</a></p>
<b>Synonyms</b>	CD16A, CD16B, FCG3, FCGR3, IGFR3
<b>RRID</b>	AB_877454
<b>Specificity</b>	<p><b>Mouse anti Human CD16 antibody, clone DJ130c</b> 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 <a href="#">Ig-like C2 type</a> domains. CD16 exists as a transmembranous form (Fc gammaRIIIA, or CD16A) and a glycosyl phosphatidylinositol (GPI) anchored form, Fc gammaRIIIB, or CD16B (<a href="#">Scallon et al. 1989</a>). CD16A is expressed by NK cells, some T cells, and macrophages, whereas CD16B is primarily expressed by granulocytes (<a href="#">Ravetch and Perussia 1989</a>). In addition, CD16B exists as two allelic variants NA1 and NA2 . DJ130c recognizes all polymorphonuclear cells irrespective of their NA phenotype.</p> <p>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, <i>Macaca mulatta</i> (<a href="#">Xu et al. 2012</a>)</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 1x10 <sup>6</sup> cells in 100ul.
<b>Histology Positive Control Tissue</b>	Human tonsil

## References

1. 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.
2. 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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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.](#)
7. Ambarus, C.A. *et al.* (2012) Systematic validation of specific phenotypic markers for in vitro polarized human macrophages. [J Immunol Methods. 375: 196-206.](#)
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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 or at -20°C if preferred.  
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. Should this product contain a precipitate we recommend microcentrifugation before use.

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<b>Guarantee</b>	12 months from date of despatch
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<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2537">https://www.bio-rad-antibodies.com/SDS/MCA2537</a> 10040
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<b>Regulatory</b>	For research purposes only
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## Related Products

### Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	<a href="#">RPE</a>
Goat Anti Mouse IgG IgA IgM (STAR87...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR76...)	<a href="#">RPE</a>
Rabbit Anti Mouse IgG (STAR13...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (STAR70...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (H/L) (STAR117...)	<a href="#">Alk. Phos.</a> , <a href="#">DyLight@488</a> , <a href="#">DyLight@550</a> , <a href="#">DyLight@650</a> , <a href="#">DyLight@680</a> , <a href="#">DyLight@800</a> , <a href="#">FITC</a> , <a href="#">HRP</a>
Rabbit Anti Mouse IgG (STAR9...)	<a href="#">FITC</a>
Goat Anti Mouse IgG (STAR77...)	<a href="#">HRP</a>
Goat Anti Mouse IgG (Fc) (STAR120...)	<a href="#">FITC</a> , <a href="#">HRP</a>

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)  
'M367127:200529'

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