

## Datasheet: MCA617F

<b>Description:</b>	RAT ANTI HUMAN CD16:FITC
<b>Specificity:</b>	CD16
<b>Other names:</b>	FcRIII
<b>Format:</b>	FITC
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	YFC120.5
<b>Isotype:</b>	IgG2b
<b>Quantity:</b>	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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/50 - 1/100

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: Cat

**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 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

<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> ) 1% Bovine Serum Albumin
<b>Approx. Protein Concentrations</b>	IgG concentration 0.1 mg/ml
<b>Immunogen</b>	Human neutrophils.
<b>External Database Links</b>	<p><b>UniProt:</b></p> <p><a href="#">O75015</a>    <a href="#">Related reagents</a></p> <p><a href="#">P08637</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b></p> <p><a href="#">2215</a> FCGR3B    <a href="#">Related reagents</a></p> <p><a href="#">2214</a> FCGR3A    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	CD16A, CD16B, FCG3, FCGR3, IGFR3
<b>Fusion Partners</b>	Spleen cells from Lou rat fused with the rat myeloma cell line. Y3/Ag.1.2.3.
<b>Specificity</b>	<b>Rat anti Human CD16 antibody, clone YFC120.5</b> binds to the leucocyte low affinity Fc receptor (Fc RIII), also known as CD16. The antigen is expressed by neutrophils, NK cells, K cells and a subpopulation of macrophages. It recognizes a ~50-70 kDa leukocyte surface antigen.
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 1x10 <sup>6</sup> cells in 100ul
<b>References</b>	<ol style="list-style-type: none"> <li>Huizinga, T.W. <i>et al.</i> (1990) Maternal genomic neutrophil FcRIII deficiency leading to neonatal isoimmune neutropenia. <a href="#">Blood. 76: 1927-32.</a></li> <li>Drescher, B. <i>et al.</i> (2003) Glycosylation of FcγRIII in N163 as mechanism of regulating receptor affinity. <a href="#">Immunology. 110: 335-40.</a></li> <li>Orr, C.F. <i>et al.</i> (2005) A possible role for humoral immunity in the pathogenesis of Parkinson's disease. <a href="#">Brain. 128 (Pt 11): 2665-74.</a></li> <li>Vermeulen, B.L. <i>et al.</i> (2012) Natural killer cells: frequency, phenotype and function in healthy cats. <a href="#">Vet Immunol Immunopathol. 150: 69-78.</a></li> <li>Vermeulen, B.L. <i>et al.</i> (2013) Suppression of NK cells and regulatory T lymphocytes in cats naturally infected with feline infectious peritonitis virus. <a href="#">Vet Microbiol. 164: 46-59.</a></li> </ol>
<b>Storage</b>	<p>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.</p> <p>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.</p>
<b>Guarantee</b>	12 months from date of despatch

**Health And Safety Information**      Material Safety Datasheet documentation #10041 available at:  
<https://www.bio-rad-antibodies.com/SDS/MCA617F>

---

**Regulatory**                      For research purposes only

---

## Related Products

### Recommended Negative Controls

[RAT IgG2b NEGATIVE CONTROL:FITC \(MCA6006F\)](#)

**Product inquiries:** [www.bio-rad-antibodies.com/technical-support](http://www.bio-rad-antibodies.com/technical-support)

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](http://bio-rad-antibodies.com/datasheets)  
'M437619:250317'

**Printed on 24 Jun 2025**

---

© 2025 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)