

## Datasheet: MCA5999F

**BATCH NUMBER 169542**

<b>Description:</b>	RAT ANTI MOUSE CD16-2:FITC
<b>Specificity:</b>	CD16-2
<b>Other names:</b>	FcRIV
<b>Format:</b>	FITC
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	AT137
<b>Isotype:</b>	IgG2a
<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	▪			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.

<b>Target Species</b>	Mouse						
<b>Product Form</b>	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid						
<b>Max Ex/Em</b>	<table border="1"> <thead> <tr> <th>Fluorophore</th> <th>Excitation Max (nm)</th> <th>Emission Max (nm)</th> </tr> </thead> <tbody> <tr> <td>FITC</td> <td>490</td> <td>525</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	FITC	490	525
Fluorophore	Excitation Max (nm)	Emission Max (nm)					
FITC	490	525					
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant						
<b>Buffer Solution</b>	Phosphate buffered saline						
<b>Preservative</b>	<0.1% Sodium Azide (NaN <sub>3</sub> )						
<b>Stabilisers</b>	1% Bovine Serum Albumin						
<b>Approx. Protein</b>	IgG concentration 0.1 mg/ml						

## Concentrations

---

**Immunogen** Fusion Protein consisting of mouse CD16-2 and rat CD4

---

**External Database Links**

**UniProt:**  
[Q8R477](#)     [Related reagents](#)

---

**Fusion Partners** Spleen cells from immunised rats were fused with cells of the NS-1 myeloma cell line

---

**Specificity** **Rat anti mouse CD16-2 antibody, clone AT137**, recognizes CD16-2, also known as FcRIV. CD16-2 is a low affinity activatory receptor that binds to IgG2a and IgG2b with intermediate affinity. FcRIV has no affinity for IgG1 or IgG3 and therefore has a unique subclass specificity when compared to other Fc receptors. Expression of CD16-2 is restricted to cells of the myeloid lineage.

---

**Flow Cytometry** Use 10ul of the suggested working dilution to label  $1 \times 10^6$  cells in 100ul

---

**References**

1. White, A.L. *et al.* (2011) Interaction with FcγRIIB is critical for the agonistic activity of anti-CD40 monoclonal antibody. [J Immunol. 187 \(4\): 1754-63.](#)
2. Lunnon, K. *et al.* (2011) Systemic inflammation modulates Fc receptor expression on microglia during chronic neurodegeneration. [J Immunol. 186: 7215-24](#)
3. Tutt AL *et al.* (2015) Development and Characterization of Monoclonal Antibodies Specific for Mouse and Human Fcγ Receptors. [J Immunol. 195 \(11\): 5503-16.](#)

---

**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.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

---

**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/MCA5999F>  
10041

---

**Regulatory** For research purposes only

---

## Related Products

### Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL:FITC \(MCA1212F\)](#)

**North & South America** Tel: +1 800 265 7376  
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)  
'M433575:241112'

**Printed on 13 Jan 2025**

---

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