

## Datasheet: MCA5999F

**BATCH NUMBER 171011**

<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 A from tissue culture supernatant						
<b>Buffer Solution</b>	Phosphate buffered saline						
<b>Preservative</b>	0.09% 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** 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.

**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 \(MCA1212F\)](#)

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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](http://bio-rad-antibodies.com/datasheets)

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