

Datasheet: MCA5999

Description:	RAT ANTI MOUSE CD16-2
Specificity:	CD16-2
Other names:	FcRIV
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	AT137
Isotype:	IgG2a
Quantity:	0.25 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.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/10
Immunohistology - Frozen	▪			1/100 - 1/1000

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	Mouse
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
Buffer Solution	TRIS buffered saline
Preservative Stabilisers	<0.1% Sodium Azide (NaN ₃)
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
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 1×10^6 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 #10057 available at: <https://www.bio-rad-antibodies.com/SDS/MCA5999>
10057

Regulatory For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)	DyLight®800
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (STAR72...)	HRP
Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR21...)	HRP
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight®550 , DyLight®650 , DyLight®800
Goat Anti Rat IgG (STAR131...)	Alk. Phos. , Biotin

Recommended Negative Controls

RAT IgG2a NEGATIVE CONTROL (MCA1212)

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Email: 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

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: 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

'M389653:210806'

Printed on 13 Jan 2025

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