

## Datasheet: MCA189B

<b>Description:</b>	MOUSE ANTI RAT IgM HEAVY CHAIN:Biotin
<b>Specificity:</b>	IgM HEAVY CHAIN
<b>Format:</b>	Biotin
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	MARM-4
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.5 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			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA	▪			125ng/ml as detecting antibody

Where this antibody 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 antibody for use in their own system using appropriate negative/positive controls.

<b>Target Species</b>	Rat
<b>Product Form</b>	Purified IgG conjugated to Biotin - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative</b>	0.09% Sodium Azide
<b>Stabilisers</b>	50% Glycerol
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	IR202 rat IgM myeloma protein
<b>RRID</b>	AB_321875
<b>Fusion Partners</b>	Spleen cells from immunized BALB/c mice were fused with cells of the mouse SP2/0 myeloma cell line.

**Specificity** Mouse anti Rat IgM Heavy Chain antibody, clone MARM-4 recognizes the mu heavy chain of rat immunoglobulin and does not cross-react with other immunoglobulin classes.

**References**

1. Bazin, H. *et al.* (1974) Three classes and four (sub)classes of rat immunoglobulins: IgM, IgA, IgE and IgG1, IgG2a, IgG2b, IgG2c. [Eur J Immunol. 4 \(1\): 44-8.](#)
2. Bazin, H. *et al.* (1978) Transplantable IgD immunoglobulin-secreting tumors in rat. [J Immunol. 121 \(5\): 2077-82.](#)
3. Khalifeh, M.S. *et al.* (2010) Investigation of the role of tumour necrosis factor- $\alpha$ , interleukin-1 $\beta$ , interleukin-10, nitric oxide and rheumatoid factor-immunoglobulin M in a rat model of arthritis. [Lab Anim. 44: 143-9.](#)
4. Bézie, S. *et al.* (2015) Compensatory Regulatory Networks between CD8 T, B, and Myeloid Cells in Organ Transplantation Tolerance. [J Immunol. 195 \(12\): 5805-15.](#)
5. Ueta, H. *et al.* (2018) Single blood transfusion induces the production of donor-specific alloantibodies and regulatory T cells mainly in the spleen. [Int Immunol. 30 \(2\): 53-67.](#)

**Storage** Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. 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 #10049 available at: 10049: <https://www.bio-rad-antibodies.com/uploads/MSDS/10049.pdf>

**Regulatory** For research purposes only

## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Biotin \(MCA1209B\)](#)

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