

## Datasheet: MCA199

**BATCH NUMBER 161102**

|                      |                                |
|----------------------|--------------------------------|
| <b>Description:</b>  | RAT ANTI MOUSE IgM HEAVY CHAIN |
| <b>Specificity:</b>  | IgM HEAVY CHAIN                |
| <b>Format:</b>       | Purified                       |
| <b>Product Type:</b> | Monoclonal Antibody            |
| <b>Clone:</b>        | LO-MM-9                        |
| <b>Isotype:</b>      | IgG2a                          |
| <b>Quantity:</b>     | 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](http://www.bio-rad-antibodies.com/protocols).

|                            | Yes | No | Not Determined | Suggested Dilution             |
|----------------------------|-----|----|----------------|--------------------------------|
| Flow Cytometry             |     |    | ▪              |                                |
| Immunohistology - Frozen   | ▪   |    |                |                                |
| Immunohistology - Paraffin |     |    | ▪              |                                |
| ELISA                      | ▪   |    |                | 5ug/ml (as a coating antibody) |
| Immunoprecipitation        |     |    | ▪              |                                |
| Western Blotting           |     |    | ▪              |                                |

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>           | Mouse  |
| <b>Product Form</b>             | Purified IgG - liquid  |
| <b>Preparation</b>              | Purified IgG prepared by affinity chromatography on mouse IgM/Sepharose 4B from tissue culture supernatant |
| <b>Buffer Solution</b>          | Phosphate buffered saline  |
| <b>Preservative Stabilisers</b> | 0.1% Sodium Azide  |

|                                       |  |
|---------------------------------------|--|
| <b>Approx. Protein Concentrations</b> | IgG concentration 1 mg/ml  |
| <b>Immunogen</b>                      | Polyclonal and monoclonal mouse IgM.   |
| <b>External Database Links</b>        | <p><b>UniProt:</b></p> <p><a href="#">P01872</a>      <a href="#">Related reagents</a></p> <p><a href="#">P01873</a>      <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b></p> <p><a href="#">16019</a> Ighm    <a href="#">Related reagents</a></p> <p><a href="#">16019</a> Ighm    <a href="#">Related reagents</a></p>  |
| <b>RRID</b>                           | AB_321869  |
| <b>Fusion Partners</b>                | Spleen cells from immunized LOU/c rats were fused with cells of the IR983F rat myeloma cell line.  |
| <b>Specificity</b>                    | <b>Rat anti Mouse IgM, clone LO-MM-9</b> is directed against the mu chain of mouse IgM.  |
| <b>References</b>                     | <ol style="list-style-type: none"> <li>1. Bazin, H. <i>et al.</i> (1974) Three classes and four (sub)classes of rat immunoglobulins: IgM, IgA, IgE and IgG1, IgG2a, IgG2b, IgG2c. <a href="#">Eur J Immunol. 4 (1): 44-8.</a></li> <li>2. Bazin, H. <i>et al.</i> (1984) Rat monoclonal antibodies. II. A rapid and efficient method of purification from ascitic fluid or serum. <a href="#">J Immunol Methods. 71: 9-16.</a></li> <li>3. Busund, L.T. <i>et al.</i> (2003) Spontaneously formed tumorigenic hybrids of Meth A sarcoma cells and macrophages <i>in vivo</i>. <a href="#">Int J Cancer. 106 (2): 153-9.</a></li> <li>4. Achtman AH <i>et al.</i> (2003) <i>Plasmodium chabaudi chabaudi</i> infection in mice induces strong B cell responses and striking but temporary changes in splenic cell distribution. <a href="#">J Immunol. 171 (1): 317-24.</a></li> <li>5. Huang, C.H. <i>et al.</i> (2011) Airway inflammation and IgE production induced by dust mite allergen-specific memory/effector Th2 cell line can be effectively attenuated by IL-35. <a href="#">J Immunol. 187: 462-71.</a></li> <li>6. Bermejo, D.A. <i>et al.</i> (2011) <i>Trypanosoma cruzi</i> infection induces a massive extrafollicular and follicular splenic B-cell response which is a high source of non-parasite-specific antibodies. <a href="#">Immunology. 132 (1): 123-33.</a></li> <li>7. Sreekanthreddy, P. <i>et al.</i> (2015) A three-dimensional model of the human blood-brain barrier to analyse the transport of nanoparticles and astrocyte/endothelial interactions. <a href="#">F1000Res. 4: 1279.</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.</p>  |
| <b>Guarantee</b>                      | 12 months from date of despatch  |

**Health And Safety  
Information**

Material Safety Datasheet documentation #10040 available at:  
<https://www.bio-rad-antibodies.com/SDS/MCA19910040>

**Regulatory**

For research purposes only

## Related Products

### Recommended Secondary Antibodies

|  |   |
|--|---|
| Goat Anti Rat IgG (STAR73...)                  | <a href="#">RPE</a>   |
| Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...) | <a href="#">DyLight®550</a> , <a href="#">DyLight®650</a> , <a href="#">DyLight®800</a> |
| Rabbit Anti Rat IgG (STAR21...)                | <a href="#">HRP</a>   |
| Rabbit Anti Rat IgG (STAR16...)                | <a href="#">DyLight®800</a>   |
| Goat Anti Rat IgG (STAR131...)                 | <a href="#">Alk. Phos.</a> , <a href="#">Biotin</a>                                     |
| Rabbit Anti Rat IgG (STAR17...)                | <a href="#">FITC</a>  |
| Goat Anti Rat IgG (STAR72...)                  | <a href="#">HRP</a>   |
| Goat Anti Rat IgG (STAR69...)                  | <a href="#">FITC</a>  |

### Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL \(MCA1212\)](#)

|                                      |   |                  |   |               |   |
|--------------------------------------|---|------------------|---|---------------|---|
| <b>North &amp; South<br/>America</b> | Tel: +1 800 265 7376<br>Fax: +1 919 878 3751<br>Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a> | <b>Worldwide</b> | Tel: +44 (0)1865 852 700<br>Fax: +44 (0)1865 852 739<br>Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a> | <b>Europe</b> | Tel: +49 (0) 89 8090 95 21<br>Fax: +49 (0) 89 8090 95 50<br>Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a> |
|--------------------------------------|---|------------------|---|---------------|---|

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)  
'M383461:210513'

Printed on 18 Jan 2024