

## Datasheet: MCA193

**BATCH NUMBER 167259**

|                      |                     |
|----------------------|---------------------|
| <b>Description:</b>  | MOUSE ANTI RAT IgE  |
| <b>Specificity:</b>  | IgE                 |
| <b>Format:</b>       | Purified            |
| <b>Product Type:</b> | Monoclonal Antibody |
| <b>Clone:</b>        | MARE-1              |
| <b>Isotype:</b>      | IgG1                |
| <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 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>           | Rat                                                                                  |
| <b>Product Form</b>             | Purified IgG - liquid                                                                |
| <b>Preparation</b>              | Purified IgG prepared by immunoaffinity on Protein G from tissue culture supernatant |
| <b>Buffer Solution</b>          | Phosphate buffered saline                                                            |
| <b>Preservative Stabilisers</b> | 0.1% Sodium Azide                                                                    |
| <b>Approx. Protein</b>          | IgG concentration 1.0 mg/ml                                                          |

## Concentrations

**Immunogen** Rat IR162, IR1016, IR2 and IR410 IgE myeloma proteins.

## External Database Links

### UniProt:

[P01855](#)

[Related reagents](#)

### Entrez Gene:

[299351](#)

Ighe

[Related reagents](#)

## RRID

AB\_321899

## Fusion Partners

Spleen cells from immunised BALB/c mice were fused with cells of the mouse SP2/0 myeloma cell line.

## Specificity

**Mouse anti Rat IgE antibody, clone MARE-1** recognizes rat epsilon heavy chain of immunoglobulin IgE and does not cross-react with other classes of rat immunoglobulin.

Mouse anti Rat IgE antibody, clone MARE-1 binds to rat IgE with an avidity of  $4 \times 10^9 \text{M}^{-1}$

## ELISA

This antibody may be used as a coating antibody in a sandwich ELISA in combination with clone MARK-1/MARL-15 (Product code MCA1296P) as detection reagent and purified rat IgE (Product code PRP07A).

## References

1. Negrão-Corrêa, D. *et al.* (1996) Intestinal transport and catabolism of IgE: a major blood-independent pathway of IgE dissemination during a *Trichinella spiralis* infection of rats. [J Immunol. 157 \(9\): 4037-44.](#)
2. Silveira, M.R. *et al.* (2002) Infection with *Strongyloides venezuelensis* induces transient airway eosinophilic inflammation, an increase in immunoglobulin E, and hyperresponsiveness in rats. [Infect Immun. 70: 6263-72.](#)
3. Bąbolewska, E. & Brzezińska-błaszczyk, E. (2015) Human-derived cathelicidin LL-37 directly activates mast cells to proinflammatory mediator synthesis and migratory response. [Cell Immunol. 293 \(2\): 67-73.](#)
4. Korinek, M. *et al.* (2016) Anti-allergic potential of *Typhonium blumei*: inhibition of degranulation via suppression of PI3K/PLC $\gamma$ 2 phosphorylation and calcium influx. [Phytomedicine. 23 \(14\): 1706-15.](#)
5. Tulinská, J. *et al.* (2018) Humoral and cellular immune response in Wistar Han RCC rats fed two genetically modified maize MON810 varieties for 90 days (EU 7th Framework Programme project GRACE). [Arch Toxicol. 92 \(7\): 2385-99.](#)
6. 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.](#)
7. Agier, J. *et al.* (2018) Cathelicidin LL-37 Affects Surface and Intracellular Toll-Like Receptor Expression in Tissue Mast Cells. [J Immunol Res. 2018: 7357162.](#)
8. Witczak, P. *et al.* (2020) The Response of Tissue Mast Cells to TLR3 Ligand Poly(I:C) Treatment. [J Immunol Res. 2020: 2140694.](#)
9. Żelechowska, P. *et al.* (2022) Different effectiveness of fungal pathogen-associated molecular patterns (PAMPs) in activating rat peritoneal mast cells. [Immunol Lett. 248:](#)

[7-15.](#)

10. Żelechowska, P. *et al.* (2021) Mannan activates tissue native and IgE-sensitized mast cells to proinflammatory response and chemotaxis in TLR4-dependent manner. [J Leukoc Biol. 109 \(5\): 931-42.](#)

11. Żelechowska, P. *et al.* (2021) Native and IgE-primed rat peritoneal mast cells exert pro-inflammatory activity and migrate in response to yeast zymosan upon Dectin-1 engagement. [Immunol Res. 69 \(2\): 176-88.](#)

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**Further Reading**

1. Bazin, H. *et al.* (1974) Transplantable immunoglobulin-secreting tumours in rats. IV. Sixty-three IgE-secreting immunocytoma tumours. [Immunology. 26 \(4\): 713-23.](#)
2. Bazin, H. *et al.* (1978) Transplantable IgD immunoglobulin-secreting tumors in rat. [J Immunol. 121 \(5\): 2077-82.](#)
3. Bazin, H. *et al.* (1984) Rat monoclonal antibodies. II. A rapid and efficient method of purification from ascitic fluid or serum. [J Immunol Methods. 71 \(1\): 9-16.](#)
4. Bazin, H. *et al.* (1984) Rat monoclonal antibodies. I. Rapid purification from *in vitro* culture supernatants. [J Immunol Methods. 66 \(2\): 261-9.](#)

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**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.

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**Guarantee**

12 months from date of despatch

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**Health And Safety Information**

Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA193>  
10040

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**Regulatory**

For research purposes only

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## Related Products

### Recommended Secondary Antibodies

|                                         |                                                                                                                                                                                                                                     |
|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rabbit Anti Mouse IgG (STAR12...)       | <a href="#">RPE</a>                                                                                                                                                                                                                 |
| Goat Anti Mouse IgG IgA IgM (STAR87...) | <a href="#">HRP</a>                                                                                                                                                                                                                 |
| Goat Anti Mouse IgG (STAR76...)         | <a href="#">RPE</a>                                                                                                                                                                                                                 |
| Rabbit Anti Mouse IgG (STAR13...)       | <a href="#">HRP</a>                                                                                                                                                                                                                 |
| Goat Anti Mouse IgG (STAR70...)         | <a href="#">FITC</a>                                                                                                                                                                                                                |
| Goat Anti Mouse IgG (H/L) (STAR117...)  | <a href="#">Alk. Phos.</a> , <a href="#">DyLight®488</a> , <a href="#">DyLight®550</a> ,<br><a href="#">DyLight®650</a> , <a href="#">DyLight®680</a> , <a href="#">DyLight®800</a> ,<br><a href="#">FITC</a> , <a href="#">HRP</a> |
| Rabbit Anti Mouse IgG (STAR9...)        | <a href="#">FITC</a>                                                                                                                                                                                                                |
| Goat Anti Mouse IgG (STAR77...)         | <a href="#">HRP</a>                                                                                                                                                                                                                 |
| Goat Anti Mouse IgG (Fc) (STAR120...)   | <a href="#">FITC</a> , <a href="#">HRP</a>                                                                                                                                                                                          |

### Recommended Negative Controls

## MOUSE IgG1 NEGATIVE CONTROL (MCA1209)

|                                  |                                                                                                                                         |                  |                                                                                                                                                 |               |                                                                                                                                                     |
|----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>North &amp; South 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)

'M383634:210513'

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