

## Datasheet: MCA193F

**BATCH NUMBER 169219**

<b>Description:</b>	MOUSE ANTI RAT IgE:FITC
<b>Specificity:</b>	IgE
<b>Format:</b>	FITC
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	MARE-1
<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	▪			5ug/ml
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	

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 Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid		
<b>Max Ex/Em</b>	<b>Fluorophore</b>	<b>Excitation Max (nm)</b>	<b>Emission Max (nm)</b>
	FITC	490	525
<b>Preparation</b>	Purified IgG prepared by affinity chromatography from tissue culture supernatant		
<b>Buffer Solution</b>	Phosphate buffered saline		
<b>Preservative Stabilisers</b>	0.1% Sodium Azide 50% Glycerol		
<b>Approx. Protein</b>	IgG concentration 1 mg/ml		

## Concentrations

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

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## External Database Links

### UniProt:

[P01855](#)    [Related reagents](#)

### Entrez Gene:

[299351](#) Ighe    [Related reagents](#)

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**RRID** AB\_321901

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

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**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  $4 \times 10^9 \text{M}^{-1}$

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**Flow Cytometry** Use 50ul of the suggested working dilution to label  $2 \times 10^7$  cells in 100ul.

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## 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. This product is photosensitive and should be protected from light.

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**Guarantee**

12 months from date of despatch

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**Health And Safety Information**

Material Safety Datasheet documentation #10328 available at: <https://www.bio-rad-antibodies.com/SDS/MCA193F>

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**Regulatory**

For research purposes only

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## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:FITC \(MCA1209F\)](#)

**Product inquiries:** [www.bio-rad-antibodies.com/technical-support](http://www.bio-rad-antibodies.com/technical-support)

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)  
'M385493:210513'

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