Datasheet: MCA193

BATCH NUMBER 170113

Description:	MOUSE ANTI RAT IgE
Specificity:	IgE
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	MARE-1
Isotype:	IgG1
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			▪	
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.

Target Species	Rat
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by immunoaffinity on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.1% Sodium Azide
Approx. Protein	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 $4x10^{9}M^{-1}$
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/PLCγ2 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.

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.
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 #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA193
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG IgA IgM (STAR87...)	HRP
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Rabbit Anti Mouse IgG (STAR12...)	RPE
Rabbit Anti Mouse IgG (STAR13...)	HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC, HRP
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos., DyLight®488, DyLight®550, DyLight®650, DyLight®680, DyLight®800, FITC, HRP

Product inquiries: 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

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Printed on 15 Apr 2026