Datasheet: MCA193B

BATCH NUMBER 169458

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

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry			▪	
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA	▪			500ng/ml as detecting antibody
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 conjugated to Biotin - liquid
Preparation	Purified IgG prepared by immunoaffinity chromatography from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.1% Sodium Azide 50% Glycerol
Approx. Protein	IgG concentration 1 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_321900
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 $4x10^{9}M^{-1}$
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 #10328 available at: https://www.bio-rad-antibodies.com/SDS/MCA193B
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:Biotin (MCA1209B)

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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