

Datasheet: MCA419B

Description:	RAT ANTI MOUSE IgE HEAVY CHAIN:Biotin
Specificity:	IgE HEAVY CHAIN
Format:	Biotin
Product Type:	Monoclonal Antibody
Clone:	LO-ME-3
Isotype:	IgG1
Quantity:	0.5 mg

Product Details

RRID AB_321896

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
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 Mouse

Species Cross Reactivity Does not react with:Rat

Product Form Purified IgG conjugated to Biotin - liquid

Preparation Purified IgG prepared by affinity chromatography from tissue culture supernatant

Buffer Solution Phosphate buffered saline

Preservative Stabilisers 0.1% Sodium Azide
50% Glycerol

Approx. Protein Concentrations IgG concentration 1 mg/ml

Immunogen Purified IgE from BALB/c mice.

External Database**Links****UniProt:**

[P06336](#) [Related reagents](#)

Entrez Gene:

[380792](#) Gm900 [Related reagents](#)

Fusion Partners

Spleen cells from immunised LOU/c rats were fused with cells of the rat IR983F myeloma cell line.

Specificity

Rat anti Mouse IgE Heavy Chain antibody, clone LO-ME-3 recognizes the murine epsilon immunoglobulin heavy chain, and does not cross react with other murine immunoglobulin classes or subclasses. The avidity of Rat anti Mouse IgE Heavy Chain antibody, clone LO-ME-3 is = $3 \times 10^9 \text{M}^{-1}$

References

1. Mojtabavi, N. *et al.* (2002) Long-lived Th2 memory in experimental allergic asthma. [J Immunol. 169 \(9\): 4788-96.](#)
2. Stevens, T. *et al.* (2008) Increased transcription of immune and metabolic pathways in naive and allergic mice exposed to diesel exhaust [Toxicol.Sci. 102: 359-70.](#)
3. Savignac, M. *et al.* (2010) Increased B cell proliferation and reduced Ig production in DREAM transgenic mice. [J Immunol. 185:7527-36.](#)
4. Bemark, M. *et al.* (2011) A unique role of the cholera toxin A1-DD adjuvant for long-term plasma and memory B cell development. [J Immunol. 186: 1399-410.](#)
5. Hashimoto, K. *et al.* (2005) Cyclooxygenase inhibition augments allergic inflammation through CD4-dependent, STAT6-independent mechanisms. [J Immunol. 174 \(1\): 525-32.](#)
6. Komai, M. *et al.* (2010) A novel CC-chemokine receptor 3 antagonist, Ki19003, inhibits airway eosinophilia and subepithelial/peribronchial fibrosis induced by repeated antigen challenge in mice. [J Pharmacol Sci. 112: 203-13.](#)
7. Komai, M. *et al.* (2003) Role of Th2 responses in the development of allergen-induced airway remodelling in a murine model of allergic asthma. [Br J Pharmacol. 138: 912-20](#)
8. Lee, M.Y. *et al.* (2011) Protective Effects of Mentha haplocalyx Ethanol Extract (MH) in a Mouse Model of Allergic Asthma. [Phytother Res. 25\(6\):863-9.](#)
9. Niwa, S. *et al.* (2010) Ovalbumin-induced plasma interleukin-4 levels are reduced in ceramide kinase-deficient DO11.10 RAG1-/- mice. [Lipids Health Dis. 9:1.](#)
10. Hazebrouck, S. *et al.* (2009) Allergic sensitization to bovine beta-lactoglobulin: comparison between germ-free and conventional BALB/c mice. [Int Arch Allergy Immunol. 148: 65-72.](#)
11. Huang, C.H. *et al.* (2011) Airway inflammation and IgE production induced by dust mite allergen-specific memory/effector Th2 cell line can be effectively attenuated by IL-35. [J Immunol. 187: 462-71.](#)
12. Kalenda, Y.D. *et al.* (2015) Tandem repeat recombinant proteins as potential antigens for the sero-diagnosis of *Schistosoma mansoni* infection. [Parasitol Int. 64 \(6\): 503-12.](#)
13. Kim, J.H. & Ohsawa, M. (1995) Oral tolerance to ovalbumin in mice as a model for detecting modulators of the immunologic tolerance to a specific antigen. [Biol Pharm Bull. 18 \(6\): 854-8.](#)
14. Ray, A. *et al.* (2015) Gut Microbial Dysbiosis Due to *Helicobacter* Drives an Increase in Marginal Zone B Cells in the Absence of IL-10 Signaling in Macrophages. [J Immunol. 195 \(7\): 3071-85.](#)
15. Nakano, Y. *et al.* (2016) Role of Prostaglandin D2 and DP1 Receptor on Japanese Cedar Pollen-Induced Allergic Rhinitis in Mice. [J Pharmacol Exp Ther. 357 \(2\): 258-63.](#)
16. Jeon, W.Y. *et al.* (2015) Soshiho-tang water extract inhibits ovalbumin-induced airway inflammation via the regulation of heme oxygenase-1. [BMC Complement Altern Med. 15 \(1\): 329.](#)
17. Ziegler, T. *et al.* (2015) A novel regulatory macrophage induced by a helminth molecule instructs IL-10 in CD4+ T cells and protects against mucosal inflammation. [J Immunol. 194 \(4\): 1555-64.](#)
18. Noble A & Zhao J (2016) Follicular helper T cells are responsible for IgE responses to Der p 1

- following house dust mite sensitization in mice. [Clin Exp Allergy. May 3 \[Epub ahead of print\]](#)
19. Roberts, H. *et al.* (2016) Characterization of neutrophil function in Papillon-Lefèvre syndrome. [J Leukoc Biol. 100 \(2\): 433-44.](#)
20. Ikeda, M. *et al.* (2016) Beneficial effects of Galectin-9 on allergen-specific sublingual immunotherapy in a *Dermatophagoides farinae*-induced mouse model of chronic asthma. [Allergol Int. pii: S1323-8930\(16\)30161-7. \[Epub ahead of print\]](#)
21. González-Chomón C *et al.* (2016) Biomimetic contact lenses eluting olopatadine for allergic conjunctivitis. [Acta Biomater. 41: 302-11.](#)
22. Maiga, M.A. *et al.* (2017) Neonatal mono-colonization of germ-free mice with *Lactobacillus casei* enhances casein immunogenicity after oral sensitization to cow's milk. [Mol Nutr Food Res. Mar 20. \[Epub ahead of print\]](#)
23. J Wadley, A. *et al.* (2017) Heightened Exercise-Induced Oxidative Stress at Simulated Moderate Level Altitude vs. Sea Level in Trained Cyclists. [Int J Sport Nutr Exerc Metab. 27 \(2\): 97-104.](#)
24. Laffont S *et al.* (2017) Androgen signaling negatively controls group 2 innate lymphoid cells. [J Exp Med. May 8. pii: jem.20161807.](#)
25. Chesné, J. *et al.* (2015) Prime role of IL-17A in neutrophilia and airway smooth muscle contraction in a house dust mite-induced allergic asthma model. [J Allergy Clin Immunol. 135 \(6\): 1643-1643.e3.](#)
26. Di, C. *et al.* (2015) Basophil-associated OX40 ligand participates in the initiation of Th2 responses during airway inflammation. [J Biol Chem. 290 \(20\): 12523-36.](#)

Storage

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee

18 months from date of despatch.

Health And Safety Information

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

Regulatory

For research purposes only

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Email: antibody_sales_us@bio-rad.com

Worldwide

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: antibody_sales_uk@bio-rad.com

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_de@bio-rad.com

'M339530:181219'

Printed on 20 May 2019