

## Datasheet: MCA419P

<b>Description:</b>	RAT ANTI MOUSE IgE HEAVY CHAIN:HRP
<b>Specificity:</b>	IgE HEAVY CHAIN
<b>Format:</b>	HRP
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	LO-ME-3
<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
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.

<b>Target Species</b>	Mouse
<b>Species Cross Reactivity</b>	Does not react with:Rat
<b>Product Form</b>	Purified IgG conjugated to Horseradish Peroxidase (HRP) - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.01% Thiomersal 50% Glycerol
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml

<b>Immunogen</b>	Purified IgE from BALB/c mice.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P06336</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">380792</a> Gm900    <a href="#">Related reagents</a></p>
<b>RRID</b>	AB_321898
<b>Fusion Partners</b>	Spleen cells from immunised LOU/c rats were fused with cells of the rat IR983F myeloma cell line.
<b>Specificity</b>	<b>Rat anti Mouse IgE Heavy Chain antibody, clone LO-ME-3</b> 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 = $3 \times 10^9 M^{-1}$
<b>References</b>	<ol style="list-style-type: none"> <li>Kim, J.H. &amp; Ohsawa, M. (1995) Oral tolerance to ovalbumin in mice as a model for detecting modulators of the immunologic tolerance to a specific antigen. <a href="#">Biol Pharm Bull. 18 (6): 854-8.</a></li> <li>Mojtabavi, N. <i>et al.</i> (2002) Long-lived Th2 memory in experimental allergic asthma. <a href="#">J Immunol. 169 (9): 4788-96.</a></li> <li>Komai, M. <i>et al.</i> (2003) Role of Th2 responses in the development of allergen-induced airway remodelling in a murine model of allergic asthma. <a href="#">Br J Pharmacol. 138: 912-20</a></li> <li>Hashimoto, K. <i>et al.</i> (2005) Cyclooxygenase inhibition augments allergic inflammation through CD4-dependent, STAT6-independent mechanisms. <a href="#">J Immunol. 174 (1): 525-32.</a></li> <li>Stevens, T. <i>et al.</i> (2008) Increased transcription of immune and metabolic pathways in naive and allergic mice exposed to diesel exhaust <a href="#">Toxicol.Sci. 102: 359-70.</a></li> <li>Hazebrouck, S. <i>et al.</i> (2009) Allergic sensitization to bovine beta-lactoglobulin: comparison between germ-free and conventional BALB/c mice. <a href="#">Int Arch Allergy Immunol. 148: 65-72.</a></li> <li>Savignac, M. <i>et al.</i> (2010) Increased B cell proliferation and reduced Ig production in DREAM transgenic mice. <a href="#">J Immunol. 185:7527-36.</a></li> <li>Komai, M. <i>et al.</i> (2010) A novel CC-chemokine receptor 3 antagonist, Ki19003, inhibits airway eosinophilia and subepithelial/peribronchial fibrosis induced by repeated antigen challenge in mice. <a href="#">J Pharmacol Sci. 112: 203-13.</a></li> <li>Niwa, S. <i>et al.</i> (2010) Ovalbumin-induced plasma interleukin-4 levels are reduced in ceramide kinase-deficient DO11.10 RAG1-/- mice. <a href="#">Lipids Health Dis. 9:1.</a></li> <li>Bemark, M. <i>et al.</i> (2011) A unique role of the cholera toxin A1-DD adjuvant for long-term plasma and memory B cell development. <a href="#">J Immunol. 186: 1399-410.</a></li> <li>Lee, M.Y. <i>et al.</i> (2011) Protective Effects of Mentha haplocalyx Ethanol Extract (MH) in a Mouse Model of Allergic Asthma. <a href="#">Phytother Res. 25(6):863-9.</a></li> <li>Huang, C.H. <i>et al.</i> (2011) Airway inflammation and IgE production induced by dust mite allergen-specific memory/effector Th2 cell line can be effectively attenuated by IL-35. <a href="#">J Immunol. 187: 462-71.</a></li> <li>Di, C. <i>et al.</i> (2015) Basophil-associated OX40 ligand participates in the initiation of</li> </ol>

- Th2 responses during airway inflammation. [J Biol Chem. 290 \(20\): 12523-36.](#)
14. 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.](#)
  15. 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.](#)
  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. 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.](#)
  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. 46 \(8\): 1075-82.](#)
  19. Roberts, H. *et al.* (2016) Characterization of neutrophil function in Papillon-Lefèvre syndrome. [J Leukoc Biol. 100 \(2\): 433-44.](#)
  20. González-Chomón C *et al.* (2016) Biomimetic contact lenses eluting olopatadine for allergic conjunctivitis. [Acta Biomater. 41: 302-11.](#)
  21. 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.](#)
  22. Ikeda, M. *et al.* (2017) Beneficial effects of Galectin-9 on allergen-specific sublingual immunotherapy in a Dermatophagoides farinae-induced mouse model of chronic asthma. [Allergol Int. 66 \(3\): 432-9.](#)
  23. 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. 61 \(9\): 1600862](#)
  24. Laffont S *et al.* (2017) Androgen signaling negatively controls group 2 innate lymphoid cells. [J Exp Med. May 8. pii: jem.20161807.](#)
  25. Yamashita, H. *et al.* (2017) Artificial sweeteners and mixture of food additives cause to break oral tolerance and induce food allergy in murine oral tolerance model for food allergy. [Clin Exp Allergy. 47 \(9\): 1204-13.](#)
  26. Ghonim, M.A. *et al.* (2018) Sulfated non-anticoagulant heparin blocks Th2-induced asthma by modulating the IL-4/signal transducer and activator of transcription 6/Janus kinase 1 pathway. [J Transl Med. 16 \(1\): 243.](#)
  27. Mohammed, E.S. *et al.* (2020) Dynamics of serological responses to defined recombinant proteins during *Schistosoma mansoni* infection in mice before and after the treatment with praziquantel. [PLoS Negl Trop Dis. 2020;14\(9\):e0008518.](#)
  28. Yamashita, H. *et al.* (2021) Impact of orally-administered oligosaccharides in a murine model of food allergy [Journal of Functional Foods. 85: 104643.](#)
  29. Laoubi, L. *et al.* (2022) Epicutaneous allergen immunotherapy induces a profound and selective modulation in skin dendritic-cell subsets. [J Allergy Clin Immunol. 150 \(5\): 1194-208.](#)

---

**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.

---

<b>Guarantee</b>	12 months from date of despatch
------------------	---------------------------------

---

<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10097 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA419P">https://www.bio-rad-antibodies.com/SDS/MCA419P</a> 10097
--------------------------------------	--

---

<b>Regulatory</b>	For research purposes only
-------------------	----------------------------

---

## Related Products

### Recommended Useful Reagents

[AbGUARD® HRP STABILIZER PLUS \(BUF052A\)](#)

[AbGUARD® HRP STABILIZER PLUS \(BUF052B\)](#)

[AbGUARD® HRP STABILIZER PLUS \(BUF052C\)](#)

[TMB CORE \(BUF056A\)](#)

[TMB CORE+ \(BUF062A\)](#)

[TMB SIGNAL+ \(BUF054A\)](#)

**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto: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](mailto: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](mailto:antibody_sales_de@bio-rad.com)

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

'M384155:210513'

**Printed on 19 Oct 2023**

---

© 2023 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)