

Datasheet: MCA336

Description:	RAT ANTI MOUSE IgG1 HEAVY CHAIN
Specificity:	IgG1 HEAVY CHAIN
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	LO-MG1-2
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	Mouse
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.1% Sodium Azide
Approx. Protein Concentrations	IgG concentration 1 mg/ml

Immunogen	Purified mouse IgG1 from BALB/c mice
External Database Links	<p>UniProt:</p> <p>P01869 Related reagents</p> <p>P01868 Related reagents</p> <p>Entrez Gene:</p> <p>16017 Ighg1 Related reagents</p> <p>16017 Ighg1 Related reagents</p>
Synonyms	Igh-4
RRID	AB_321954
Fusion Partners	Spleen cells from immunised LOU/c rats were fused with cells of the rat IR983F myeloma cell line.
Specificity	Rat anti Mouse IgG1 Heavy Chain antibody, clone LO-MG1-2 recognizes murine IgG1, and does not bind other mouse immunoglobulin classes or subclasses.
References	<ol style="list-style-type: none"> 1. Denis, O. <i>et al.</i> (1993) Resting B cells can act as antigen presenting cells in vivo and induce antibody responses. Int Immunol. 5 (1): 71-8. 2. Song, J. <i>et al.</i> (2000) Heterogeneous distribution of isoactins in cultured vascular smooth muscle cells does not reflect segregation of contractile and cytoskeletal domains. J Histochem Cytochem. 48 (11): 1441-52. 3. Blackwell, N.M. & Else, K.J. (2002) A comparison of local and peripheral parasite-specific antibody production in different strains of mice infected with <i>Trichuris muris</i>. Parasite Immunol. 24 (4): 203-11. 4. Hall, G. <i>et al.</i> (2003) Suppression of allergen reactive Th2 mediated responses and pulmonary eosinophilia by intranasal administration of an immunodominant peptide is linked to IL-10 production. Vaccine. 21 (5-6): 549-61. 5. Echeverria, P.C. <i>et al.</i> (2006) Potent antigen-specific immunity to <i>Toxoplasma gondii</i> in adjuvant-free vaccination system using Rop2-<i>Leishmania infantum</i> Hsp83 fusion protein. Vaccine. 24: 4102-10. 6. Ramos, J.D.A. <i>et al.</i> (2009) Characterization of Blo t 11 Monoclonal Antibodies with Constant Region Mutations Phil Sci Lett. 2(1): 38-48 7. Nakanishi, S. <i>et al.</i> (2010) Sequence analysis of a bacteriocinogenic plasmid of <i>Clostridium butyricum</i> and expression of the bacteriocin gene in <i>Escherichia coli</i>. Anaerobe. 16: 253-7. 8. Hjerpe, C. <i>et al.</i> (2010) Dendritic cells pulsed with malondialdehyde modified low density lipoprotein aggravate atherosclerosis in Apoe(-/-) mice. Atherosclerosis. 209 (2): 436-41. 9. 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. J Immunol. 187: 462-71. 10. Agallou, M. <i>et al.</i> (2014) Experimental Validation of Multi-Epitope Peptides Including Promising MHC Class I- and II-Restricted Epitopes of Four Known <i>Leishmania infantum</i>

Proteins. [Front Immunol. 5: 268.](#)

11. Kato, G. *et al.* (2014) β 2 adrenergic agonist attenuates house dust mite-induced allergic airway inflammation through dendritic cells. [BMC Immunol. 15: 39.](#)
12. Doerfler, P.A. *et al.* (2015) BAFF Blockade Prevents Anti-Drug Antibody Formation in a Mouse Model of Pompe Disease. [Clin Immunol. pii: S1521-6616\(15\)00125-4.](#)
13. Kretschmer, B. *et al.* (2015) Anti-CD83 promotes IgG1 isotype switch in marginal zone B cells in response to TI-2 antigen. [Immunobiology. 220 \(8\): 964-75.](#)
14. Doerfler, P.A. *et al.* (2016) Copackaged AAV9 Vectors Promote Simultaneous Immune Tolerance and Phenotypic Correction of Pompe Disease. [Hum Gene Ther. 27 \(1\): 43-59.](#)
15. Margaroni, M. *et al.* (2017) Vaccination with poly(D,L-lactide-co-glycolide) nanoparticles loaded with soluble *Leishmania* antigens and modified with a TNF α -mimicking peptide or monophosphoryl lipid A confers protection against experimental visceral leishmaniasis. [Int J Nanomedicine. 12: 6169-84.](#)
16. Steel, N. *et al.* (2019) TGF β -activation by dendritic cells drives Th17 induction and intestinal contractility and augments the expulsion of the parasite *Trichinella spiralis* in mice. [PLoS Pathog. 15 \(4\): e1007657.](#)
17. DeGiovanni, C. *et al.* (2019) Cancer Vaccines Co-Targeting HER2/Neu and IGF1R. [Cancers \(Basel\). 11 \(4\) Apr 11 \[Epub ahead of print\].](#)
18. Scaramozza, A. *et al.* (2019) Lineage Tracing Reveals a Subset of Reserve Muscle Stem Cells Capable of Clonal Expansion under Stress. [Cell Stem Cell. 24 \(6\): 944-957.e5.](#)
19. Salem, E. *et al.* (2019) Pathogenesis, Host Innate Immune Response, and Aerosol Transmission of Influenza D Virus in Cattle. [J Virol. 93\(7\):e01853-18.](#)
20. Doshi, B.S. *et al.* (2021) B cell-activating factor modulates the factor VIII immune response in hemophilia A. [J Clin Invest. 131\(8\):142906.](#)
21. Petta, I. *et al.* (2024) Myeloid A20 is critical for alternative macrophage polarization and type-2 immune mediated helminth resistance [Front Immunol. 15: 21 Mar \[Epub ahead of print\]](#)

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/MCA336>
10040

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)

[DyLight®800](#)

Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (STAR72...)	HRP
Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR21...)	HRP
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight®550 , DyLight®650 , DyLight®800
Goat Anti Rat IgG (STAR131...)	Alk. Phos. , Biotin

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'M384492:210513'

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