

## Datasheet: MCA336P

|                      |                                     |
|----------------------|-------------------------------------|
| <b>Description:</b>  | RAT ANTI MOUSE IgG1 HEAVY CHAIN:HRP |
| <b>Specificity:</b>  | IgG1 HEAVY CHAIN                    |
| <b>Format:</b>       | HRP                                 |
| <b>Product Type:</b> | Monoclonal Antibody                 |
| <b>Clone:</b>        | LO-MG1-2                            |
| <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>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</b>                   | 0.01% Thiomersal                                                                                                                      |
| <b>Stabilisers</b>                    | 50% Glycerol                                                                                                                          |
| <b>Approx. Protein Concentrations</b> | IgG concentration 1 mg/ml                                                                                                             |
| <b>Immunogen</b>                      | Purified mouse IgG1 from BALB/c mice                                                                                                  |
| <b>External Database Links</b>        | <b>UniProt:</b><br><a href="#">P01869</a> <a href="#">Related reagents</a><br><a href="#">P01868</a> <a href="#">Related reagents</a> |

**Entrez Gene:**[16017](#) Ighg1 [Related reagents](#)[16017](#) Ighg1 [Related reagents](#)

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| <b>Synonyms</b>        | Igh-4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <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 IgG1 Heavy Chain antibody, clone LO-MG1-2</b> recognizes murine IgG1, and does not bind other mouse immunoglobulin classes or subclasses.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>ELISA</b>           | This product may be used in a direct ELISA or as a detection reagent in a sandwich ELISA together with <a href="#">MCA1289</a> as the capture reagent.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>References</b>      | <ol style="list-style-type: none"> <li>1. 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. <a href="#">J Histochem Cytochem. 48 (11): 1441-52.</a></li> <li>2. Denis, O. <i>et al.</i> (1993) Resting B cells can act as antigen presenting cells in vivo and induce antibody responses. <a href="#">Int Immunol. 5 (1): 71-8.</a></li> <li>3. 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>. <a href="#">Anaerobe. 16: 253-7.</a></li> <li>4. Echeverria, P.C. <i>et al.</i> (2006) Potent antigen-specific immunity to Toxoplasma gondii in adjuvant-free vaccination system using Rop2-Leishmania infantum Hsp83 fusion protein. <a href="#">Vaccine. 24: 4102-10.</a></li> <li>5. 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>6. 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 Leishmania infantum Proteins. <a href="#">Front Immunol. 5: 268.</a></li> <li>7. Doerfler, P.A. <i>et al.</i> (2015) BAFF Blockade Prevents Anti-Drug Antibody Formation in a Mouse Model of Pompe Disease. <a href="#">Clin Immunol. pii: S1521-6616(15)00125-4.</a></li> <li>8. Ramos, J.D.A. <i>et al.</i> (2009) Characterization of Blo t 11 Monoclonal Antibodies with Constant Region Mutations <a href="#">Phil Sci Lett. 2(1): 38-48.</a></li> <li>9. Blackwell, N.M. &amp; Else, K.J. (2002) A comparison of local and peripheral parasite-specific antibody production in different strains of mice infected with Trichuris muris. <a href="#">Parasite Immunol. 24 (4): 203-11.</a></li> <li>10. 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. <a href="#">Vaccine. 21 (5-6): 549-61.</a></li> <li>11. Hjerpe, C. <i>et al.</i> (2010) Dendritic cells pulsed with malondialdehyde modified low density lipoprotein aggravate atherosclerosis in Apoe(-/-) mice. <a href="#">Atherosclerosis. 209 (2): 436-41.</a></li> <li>12. Kretschmer, B. <i>et al.</i> (2015) Anti-CD83 promotes IgG1 isotype switch in marginal zone B cells in response to TI-2 antigen. <a href="#">Immunobiology. 220 (8): 964-75.</a></li> <li>13. Doerfler, P.A. <i>et al.</i> (2016) Copackaged AAV9 Vectors Promote Simultaneous Immune Tolerance and Phenotypic Correction of Pompe Disease. <a href="#">Hum Gene Ther. 27 (1): 43-59.</a></li> <li>14. Kato, G. <i>et al.</i> (2014) <math>\beta</math>2 adrenergic agonist attenuates house dust mite-induced allergic airway inflammation through dendritic cells. <a href="#">BMC Immunol. 15: 39.</a></li> <li>15. Margaroni, M. <i>et al.</i> (2017) Vaccination with poly(D,L-lactide-co-glycolide) nanoparticles loaded with soluble <i>Leishmania</i> antigens and modified with a TNF<math>\alpha</math>-mimicking peptide or monophosphoryl lipid A confers protection against experimental visceral leishmaniasis. <a href="#">Int J Nanomedicine. 12:</a></li> </ol> |

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**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.

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**Shelf Life**

18 months from date of despatch.

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**Health And Safety  
Information**

Material Safety Datasheet documentation #10097 available at:  
10097: <https://www.bio-rad-antibodies.com/uploads/MSDS/10097.pdf>

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**Regulatory**

For research purposes only

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## 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+ \(BUF054A\)](#)

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