

Datasheet: MCA421B

Description:	RAT ANTI MOUSE IgG2a HEAVY CHAIN:Biotin
Specificity:	IgG2a HEAVY CHAIN
Format:	Biotin
Product Type:	Monoclonal Antibody
Clone:	LO-MG2a-7
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	▪			0.5ug/ml - 1.0ug/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
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 IgG from BALB/c mice.
External Database Links	<p>UniProt:</p> <p>P01863 Related reagents</p> <p>P01865 Related reagents</p> <p>P01864 Related reagents</p> <p>Entrez Gene:</p> <p>380793 Igh-1a Related reagents</p> <p>380793 Igh-1a Related reagents</p> <p>380793 Igh-1a Related reagents</p>
RRID	AB_321823
Fusion Partners	Spleen cells from immunised LOU/c rats were fused with cells of the rat IR983F myeloma cell line.
Specificity	Rat anti Mouse IgG2a:Biotin, clone LO-MG2a-7 recognizes the gamma 2a heavy chain of mouse immunoglobulin and does not cross-react with other murine immunoglobulin classes or subclasses. Rat anti Mouse IgG2a Heavy Chain antibody, clone LO-MG2a-7 recognizes an allotypic determinant upon mouse IgG2a. It recognizes the IgH1a allotype (as expressed in Balb/c mice), but not the IgH1b allotype (as expressed in C57/BL mice).
References	<ol style="list-style-type: none"> 1. Bazin, H. (1982) Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. <i>Prot Biol Fluids</i> 615 - 8. Pergamon Press, Oxford and New York. 2. Bazin, H. <i>et al.</i> (1984) Rat monoclonal antibodies. I. Rapid purification from in vitro culture supernatants. J Immunol Methods. 66 (2): 261-9. 3. Bazin, H. <i>et al.</i> (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. Ormstad, H. <i>et al.</i> (2000) The fungal cell wall component beta-1,3-glucan has an adjuvant effect on the allergic response to ovalbumin in mice. J Toxicol Environ Health A. 61: 55-67. 5. Nagao, K. <i>et al.</i> (2003) Role of prostaglandin I2 in airway remodeling induced by repeated allergen challenge in mice. Am J Respir Cell Mol Biol. 29: 314-20. 6. Ormstad, H. <i>et al.</i> (2003) The effect of endotoxin on the production of IgE, IgG1 and IgG2a antibodies against the cat allergen Fel d 1 in mice Toxicology. 188: 309-18. 7. 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: 549-61. 8. Wolfowicz, C.B. <i>et al.</i> (2003) Expression and immunogenicity of the major house dust mite allergen Der p 1 following DNA immunization. Vaccine. 21: 1195-204. 9. Tan, L.K. <i>et al.</i> (2006) Intramuscular immunization with DNA construct containing Der p 2 and signal peptide sequences primed strong IgE production. Vaccine. 24: 5762-71. 10. Ramos, J.D.A. <i>et al.</i> (2009) Characterization of Blo t 11 Monoclonal Antibodies with Constant Region Mutations Phil Sci Lett 2: 38- 48. 11. Liedén, A. <i>et al.</i> (2009) Cornulin, a marker of late epidermal differentiation, is

down-regulated in eczema. [Allergy. 64:304-11.](#)

12. Hayes, K.S. *et al.* (2017) Chronic *Trichuris muris* infection causes neoplastic change in the intestine and exacerbates tumour formation in APC min/+ mice. [PLoS Negl Trop Dis. 11 \(6\): e0005708.](#)

13. DeGiovanni, C. *et al.* (2019) Cancer Vaccines Co-Targeting HER2/Neu and IGF1R. [Cancers \(Basel\). 11 \(4\) Apr 11 \[Epub ahead of print\].](#)

14. 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.](#)

Further Reading

1. Querinjean, P. *et al.* (1972) Transplantable immunoglobulin-secreting tumours in rats. Purification and chemical characterization of four kappa chains from LOU-Wsl rats. [Eur J Biochem. 31 \(2\): 354-9.](#)

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/MCA421B10328>

Regulatory

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