

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

RRID AB_321823

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 0.1% Sodium Azide

Stabilisers 50% Glycerol

Approx. Protein Concentrations IgG concentration 1 mg/ml

Immunogen Purified IgG from BALB/c mice.

External Database Links **UniProt:**

[P01863](#) [Related reagents](#)

[P01865](#) [Related reagents](#)

[P01864](#) [Related reagents](#)

Entrez Gene:

[380793](#) Igh-1a [Related reagents](#)

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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

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2. Bazin, H. (1982) Production of rat monoclonal antibodies with the LOU rat non secreting IR983F myeloma cell line. Prot Biol Fluids 615 - 8. Pergamon Press, Oxford and New York.
3. Nagao, K. *et al.* (2003) Role of prostaglandin I2 in airway remodeling induced by repeated allergen challenge in mice. [Am J Respir Cell Mol Biol. 29: 314-20.](#)
4. Bazin, H. *et al.* (1984) Rat monoclonal antibodies. I. Rapid purification from in vitro culture supernatants. [J Immunol Methods. 66 \(2\): 261-9.](#)
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6. Ramos, J.D.A. *et al.* (2009) Characterization of Blo t 11 Monoclonal Antibodies with Constant Region Mutations [Philippine Science Letters 2: 38- 48.](#)
7. Ormstad, H. *et al.* (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.](#)
8. Ormstad, H. *et al.* (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.](#)
9. Hall, G. *et al.* (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.](#)
10. Tan, L.K. *et al.* (2006) Intramuscular immunization with DNA construct containing Der p 2 and signal peptide sequences primed strong IgE production. [Vaccine. 24: 5762-71.](#)
11. Instanes, C. and Hetland, G. (2004) Deoxynivalenol (DON) is toxic to human colonic, lung and monocytic cell lines, but does not increase the IgE response in a mouse model for allergy. [Toxicology. 204: 13-21.](#)
12. Liedén, A. *et al.* (2009) Cornulin, a marker of late epidermal differentiation, is down-regulated in eczema. [Allergy. 64:304-11.](#)
13. Wolfowicz, C.B. *et al.* (2003) Expression and immunogenicity of the major house dust mite allergen Der p 1 following DNA immunization. [Vaccine. 21: 1195-204.](#)
14. 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.](#)

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 \(2\):](#)

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

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