

Datasheet: MCA421P

Description:	RAT ANTI MOUSE IgG2a HEAVY CHAIN:HRP
Specificity:	IgG2a HEAVY CHAIN
Format:	HRP
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
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA	▪			0.5ug/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 Horseradish Peroxidase (HRP) - liquid
Preparation	Purified IgG prepared by affinity chromatography from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.01% Thiomersal 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](#)
[380793](#) Igh-1a [Related reagents](#)
[380793](#) Igh-1a [Related reagents](#)

RRID

AB_321825

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 Phil Sci Lett 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.](#)
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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.](#)
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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.](#)

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

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.](#)

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

Regulatory 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+ \(BUF054A\)](#)

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