

## Datasheet: MCA421P

**BATCH NUMBER 173855**

<b>Description:</b>	RAT ANTI MOUSE IgG2a HEAVY CHAIN:HRP
<b>Specificity:</b>	IgG2a HEAVY CHAIN
<b>Format:</b>	HRP
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	LO-MG2a-7
<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	▪			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.

<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>	0.0095% MIT
<b>Stabilisers</b>	50% Glycerol
<b>Approx. Protein Concentrations</b>	IgG concentration 1 mg/ml
<b>Immunogen</b>	Purified IgG from BALB/c mice.

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**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](#)

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**RRID**

AB\_321825

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**Fusion Partners**

Spleen cells from immunised LOU/c rats were fused with cells of the rat IR983F myeloma cell line.

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**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).

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**References**

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2. 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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4. 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.](#)
5. 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.](#)
6. 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.](#)
7. 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.](#)
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11. Liedén, A. *et al.* (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) TGFβ-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.](#)

<b>Further Reading</b>	1. Querinjean, P. <i>et al.</i> (1972) Transplantable immunoglobulin-secreting tumours in rats. Purification and chemical characterization of four kappa chains from LOU-Wsl rats. <a href="#">Eur J Biochem. 31 (2): 354-9.</a>
<b>Storage</b>	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.
<b>Guarantee</b>	12 months from date of despatch
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #20516 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA421P">https://www.bio-rad-antibodies.com/SDS/MCA421P</a>
<b>Regulatory</b>	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+ \(BUF054A\)](#)

**Product inquiries:** [www.bio-rad-antibodies.com/technical-support](http://www.bio-rad-antibodies.com/technical-support)

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](http://bio-rad-antibodies.com/datasheets)  
 'M434276:250131'

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