

Datasheet: MCA421F

Description:	RAT ANTI MOUSE IgG2a HEAVY CHAIN:FITC
Specificity:	IgG2a HEAVY CHAIN
Format:	FITC
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	▪			2.5 ug/ml
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	

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 Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid						
Max Ex/Em	<table border="1"> <thead> <tr> <th>Fluorophore</th> <th>Excitation Max (nm)</th> <th>Emission Max (nm)</th> </tr> </thead> <tbody> <tr> <td>FITC</td> <td>490</td> <td>525</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	FITC	490	525
Fluorophore	Excitation Max (nm)	Emission Max (nm)					
FITC	490	525					
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 1.0mg/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_321824

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).

Flow Cytometry Use 10ul of the suggested working dilution to label 10⁶ cells in 100ul.

References

1. Jarman, E.R. & Lamb, J.R. (2004) Reversal of established CD4+ type 2 T helper-mediated allergic airway inflammation and eosinophilia by therapeutic treatment with DNA vaccines limits progression towards chronic inflammation and remodelling. [Immunology. 112 \(4\): 631-42.](#)
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.](#)
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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.](#)

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.](#)

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

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 Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.

Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee 12 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

Related Products

Recommended Useful Reagents

[MOUSE SEROBLOCK FcR \(BUF041A\)](#)

[MOUSE SEROBLOCK FcR \(BUF041B\)](#)

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