

## Datasheet: MCA421

|                      |                                  |
|----------------------|----------------------------------|
| <b>Description:</b>  | RAT ANTI MOUSE IgG2a HEAVY CHAIN |
| <b>Specificity:</b>  | IgG2a HEAVY CHAIN                |
| <b>Format:</b>       | Purified                         |
| <b>Product Type:</b> | Monoclonal Antibody              |
| <b>Clone:</b>        | LO-MG2a-7                        |
| <b>Isotype:</b>      | IgG1                             |
| <b>Quantity:</b>     | 0.25 mg                          |

## Product Details

**RRID** AB\_321822

**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         |
|----------------------------|-----|----|----------------|----------------------------|
| Flow Cytometry             |     |    | ▪              |                            |
| Immunohistology - Frozen   |     |    | ▪              |                            |
| Immunohistology - Paraffin |     |    | ▪              |                            |
| ELISA                      | ▪   |    |                | 5ug/ml as coating antibody |
| Immunoprecipitation        |     |    | ▪              |                            |
| 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 - liquid

**Preparation** Purified IgG prepared by affinity chromatography from tissue culture supernatant

**Buffer Solution** Phosphate buffered saline

**Preservative Stabilisers** 0.1% Sodium Azide

**Approx. Protein Concentrations** IgG concentration 1.0mg/ml

**Immunogen** Purified IgG from BALB/c mice.

**External Database** **UniProt:**

## Links

[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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## 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. (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.
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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.](#)
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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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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.](#)

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**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.

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**Guarantee** 18 months from date of despatch.

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**Health And Safety Information** Material Safety Datasheet documentation #10040 available at: 10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

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**Regulatory** For research purposes only

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## Related Products

### Recommended Secondary Antibodies

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|--|---|
| Rabbit Anti Rat IgG (STAR17...)                | <a href="#">FITC</a>                                |
| Goat Anti Rat IgG (STAR69...)                  | <a href="#">FITC</a>                                |
| Goat Anti Rat IgG (STAR131...)                 | <a href="#">Alk. Phos.</a> , <a href="#">Biotin</a> |
| Goat Anti Rat IgG (STAR73...)                  | <a href="#">RPE</a>                                 |
| Rabbit Anti Rat IgG (STAR21...)                | <a href="#">HRP</a>                                 |
| Goat Anti Rat IgG (STAR72...)                  | <a href="#">HRP</a>                                 |
| Rabbit Anti Rat IgG (STAR16...)                | <a href="#">DyLight®800</a>                         |
| Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...) | <a href="#">DyLight®800</a>                         |

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