

## Datasheet: MCA1212A405

|                      |                                             |
|----------------------|---------------------------------------------|
| <b>Description:</b>  | RAT IgG2a NEGATIVE CONTROL:Alexa Fluor® 405 |
| <b>Specificity:</b>  | RAT IgG2a NEGATIVE CONTROL                  |
| <b>Format:</b>       | ALEXA FLUOR® 405                            |
| <b>Product Type:</b> | Negative/Isotype Control                    |
| <b>Isotype:</b>      | IgG2a                                       |
| <b>Quantity:</b>     | 100 TESTS/1ml                               |

## 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 |
|----------------|-----|----|----------------|--------------------|
| Flow Cytometry | ■   |    |                | *                  |

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 dilutes the antibody for use in their own system to a concentration equivalent to their test antibody

|                                       |                                                                                                                                                                                                                                                                                  |                            |                          |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|--------------------------|
| <b>Target Species</b>                 | Negative Control                                                                                                                                                                                                                                                                 |                            |                          |
| <b>Product Form</b>                   | Purified IgG conjugated to Alexa Fluor® 405 - liquid                                                                                                                                                                                                                             |                            |                          |
| <b>Max Ex/Em</b>                      | <b>Fluorophore</b>                                                                                                                                                                                                                                                               | <b>Excitation Max (nm)</b> | <b>Emission Max (nm)</b> |
|                                       | Alexa Fluor®405                                                                                                                                                                                                                                                                  | 401                        | 421                      |
| <b>Preparation</b>                    | Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant                                                                                                                                                                                    |                            |                          |
| <b>Buffer Solution</b>                | Phosphate buffered saline                                                                                                                                                                                                                                                        |                            |                          |
| <b>Preservative Stabilisers</b>       | 0.09% Sodium Azide                                                                                                                                                                                                                                                               |                            |                          |
|                                       | 1% Bovine Serum Albumin                                                                                                                                                                                                                                                          |                            |                          |
| <b>Approx. Protein Concentrations</b> | IgG concentration 0.05 mg/ml                                                                                                                                                                                                                                                     |                            |                          |
| <b>Immunogen</b>                      | Human lymphocytes.                                                                                                                                                                                                                                                               |                            |                          |
| <b>Fusion Partners</b>                | Spleen cells from immunized DA rats were fused with cells of the rat Y3/Ag1.2.3. myeloma cell line.                                                                                                                                                                              |                            |                          |
| <b>Specificity</b>                    | <p><b>Rat IgG2a Negative Control antibody</b> is suitable for the assessment of the level of non-specific binding of rat IgG2a monoclonal antibodies to mouse cells.</p> <p>Test results indicate Rat IgG2a Negative Control antibody is also suitable for use as a negative</p> |                            |                          |

control with dog cells.

**N.B.** This antibody recognizes a human cell surface marker, and therefore is not suitable as a negative control in human cells or cell lines.

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## References

1. Sumagin, R. *et al.* (2008) Leukocyte-endothelial cell interactions are linked to vascular permeability via ICAM-1-mediated signaling. [Am J Physiol Heart Circ Physiol. 295: H969-H977.](#)
2. Chiu, W.C. *et al.* (2011) Effects of dietary fish oil supplementation on cellular adhesion molecule expression and tissue myeloperoxidase activity in hypercholesterolemic mice with sepsis. [J Nutr Biochem. 20: 254-60.](#)
3. Guilloteau, L.A. *et al.* (2003) Nramp1 is not a major determinant in the control of *Brucella melitensis* infection in mice. [Infect Immun. 71: 621-8.](#)
4. Stapleton, T.W. *et al.* (2000) Investigation of the regenerative capacity of an acellular porcine medial meniscus for tissue engineering applications. [Tissue Eng Part A. 17: 231-42.](#)
5. Park, S.W. *et al.* (2012) A1 adenosine receptor allosteric enhancer PD-81723 protects against renal ischemia-reperfusion injury. [Am J Physiol Renal Physiol. 303: F721-32.](#)
6. Schmidt, E.P. *et al.* (2012) The pulmonary endothelial glycocalyx regulates neutrophil adhesion and lung injury during experimental sepsis. [Nat Med. 18 \(8\): 1217-23.](#)
7. McConnell, M.J. *et al.* (2009) H2-K(b) and H2-D(b) regulate cerebellar long-term depression and limit motor learning. [Proc Natl Acad Sci U S A. 106: 6784-9.](#)
8. Rabadi MM *et al.* (2016) Peptidyl arginine deiminase-4 deficient mice are protected against kidney and liver injury after renal ischemia and reperfusion. [Am J Physiol Renal Physiol. Jun 22: ajprenal.00254.2016. \[Epub ahead of print\]](#)

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## Storage

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

This product should be stored undiluted. 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

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## Shelf Life

18 months from date of despatch

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## Acknowledgements

The Alexa Fluor® dye antibody conjugates in this product are sold under license from Molecular Probes, Inc. for research use only, except for use in combination with microarrays, and are covered by pending and issued patents

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## Health And Safety Information

Material Safety Datasheet documentation #10041 available at:  
10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

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## Regulatory

For research purposes only

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