

## Datasheet: MCA1212PE

**BATCH NUMBER 168416**

<b>Description:</b>	RAT IgG2a NEGATIVE CONTROL:RPE
<b>Specificity:</b>	RAT IgG2a NEGATIVE CONTROL
<b>Format:</b>	RPE
<b>Product Type:</b>	Negative/Isotype Control
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	100 TESTS

## 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 product 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 product for use in their own system using appropriate negative/positive controls.

<b>Target Species</b>	Negative Control
<b>Product Form</b>	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized
<b>Reconstitution</b>	Reconstitute with 1 ml distilled water

Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	RPE 488nm laser	496	578

<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
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<b>Buffer Solution</b>	Phosphate buffered saline
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<b>Preservative</b>	0.09% sodium azide (NaN <sub>3</sub> )
<b>Stabilisers</b>	1% bovine serum albumin
	5% sucrose

<b>Immunogen</b>	Human lymphocytes.
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RRID	AB_322676
Fusion Partners	Spleen cells from immunized DA rats were fused with cells of the rat Y3/Ag1.2.3. myeloma cell line.
Specificity	<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 control with canine cells.</p> <p><b>N.B.</b> This antibody recognizes a human cell surface marker, and therefore is not suitable as a negative control in human cells or cell lines.</p>
Flow Cytometry	Use 10µl of the suggested working dilution to label 10 <sup>6</sup> cells in 100µl
References	<ol style="list-style-type: none"> <li>1. Stapleton, T.W. <i>et al.</i> (2000) Investigation of the regenerative capacity of an acellular porcine medial meniscus for tissue engineering applications. <a href="#">Tissue Eng Part A. 17: 231-42.</a></li> <li>2. Guilloteau, L.A. <i>et al.</i> (2003) Nramp1 is not a major determinant in the control of <i>Brucella melitensis</i> infection in mice. <a href="#">Infect Immun. 71: 621-8.</a></li> <li>3. Sumagin, R. <i>et al.</i> (2008) Leukocyte-endothelial cell interactions are linked to vascular permeability via ICAM-1-mediated signaling. <a href="#">Am J Physiol Heart Circ Physiol. 295: H969-H977.</a></li> <li>4. McConnell, M.J. <i>et al.</i> (2009) H2-K(b) and H2-D(b) regulate cerebellar long-term depression and limit motor learning. <a href="#">Proc Natl Acad Sci U S A. 106: 6784-9.</a></li> <li>5. Chiu, W.C. <i>et al.</i> (2011) Effects of dietary fish oil supplementation on cellular adhesion molecule expression and tissue myeloperoxidase activity in hypercholesterolemic mice with sepsis. <a href="#">J Nutr Biochem. 20: 254-60.</a></li> <li>6. Schmidt, E.P. <i>et al.</i> (2012) The pulmonary endothelial glycocalyx regulates neutrophil adhesion and lung injury during experimental sepsis. <a href="#">Nat Med. 18 (8): 1217-23.</a></li> <li>7. Park, S.W. <i>et al.</i> (2012) A1 adenosine receptor allosteric enhancer PD-81723 protects against renal ischemia-reperfusion injury. <a href="#">Am J Physiol Renal Physiol. 303: F721-32.</a></li> <li>8. Rabadi, M. <i>et al.</i> (2016) Peptidyl arginine deiminase-4-deficient mice are protected against kidney and liver injury after renal ischemia and reperfusion. <a href="#">Am J Physiol Renal Physiol. 311 (2): F437-49.</a></li> <li>9. Rabadi, M.M. <i>et al.</i> (2019) Peptidyl arginine deiminase-4 exacerbates ischemic AKI by finding NEMO. <a href="#">Am J Physiol Renal Physiol. 316 (6): F1180-F1190.</a></li> <li>10. Han, S.J. <i>et al.</i> (2020) Renal proximal tubular NEMO plays a critical role in ischemic acute kidney injury. <a href="#">JCI Insight. 5 (19): e139246.</a></li> <li>11. Ono, Y. <i>et al.</i> (2018) CD11c+ M1-like macrophages (Møs) but not CD206+ M2-like Mø are involved in folliculogenesis in mice ovary. <a href="#">Sci Rep. 8 (1): 8171.</a></li> <li>12. Han, S.J. <i>et al.</i> (2020) Selective nanoparticle-mediated targeting of renal tubular Toll-like receptor 9 attenuates ischemic acute kidney injury. <a href="#">Kidney Int. 98 (1): 76-87.</a></li> <li>13. Rogato, F. <i>et al.</i> (2024) Leukemia cutis as a prominent clinical sign in a dog with acute myeloid leukemia. <a href="#">Vet Clin Pathol. 53 (4): 448-57.</a></li> </ol>

**Storage** Prior to reconstitution store at +4°C. Following reconstitution store at +4°C.  
DO NOT FREEZE.  
This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #20487 available at:  
<https://www.bio-rad-antibodies.com/SDS/MCA1212PE>  
20487

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**Regulatory** For research purposes only

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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)  
'M419324:230616'

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