

Datasheet: MCA1212A647

BATCH NUMBER 173356

Description:	RAT IgG2a NEGATIVE CONTROL:Alexa Fluor® 647
Specificity:	RAT IgG2a NEGATIVE CONTROL
Format:	ALEXA FLUOR® 647
Product Type:	Negative/Isotype Control
Isotype:	IgG2a
Quantity:	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.

	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.

Target Species	Negative Control		
Product Form	Purified IgG conjugated to Alexa Fluor® 647 - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	Alexa Fluor®647	650	665
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% sodium azide (NaN ₃)		
Stabilisers	1% bovine serum albumin		
Approx. Protein Concentrations	IgG concentration 0.05 mg/ml		
Immunogen	Human lymphocytes.		

RRID	AB_567361
Fusion Partners	Spleen cells from immunized DA rats were fused with cells of the rat Y3/Ag1.2.3. myeloma cell line.
Specificity	<p>Rat IgG2a Negative Control antibody 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>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.</p>
References	<ol style="list-style-type: none"> 1. Stapleton, T.W. <i>et al.</i> (2000) Investigation of the regenerative capacity of an acellular porcine medial meniscus for tissue engineering applications. Tissue Eng Part A. 17: 231-42. 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. Infect Immun. 71: 621-8. 3. Sumagin, R. <i>et al.</i> (2008) Leukocyte-endothelial cell interactions are linked to vascular permeability via ICAM-1-mediated signaling. Am J Physiol Heart Circ Physiol. 295: H969-H977. 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. Proc Natl Acad Sci U S A. 106: 6784-9. 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. J Nutr Biochem. 20: 254-60. 6. Schmidt, E.P. <i>et al.</i> (2012) The pulmonary endothelial glycocalyx regulates neutrophil adhesion and lung injury during experimental sepsis. Nat Med. 18 (8): 1217-23. 7. Park, S.W. <i>et al.</i> (2012) A1 adenosine receptor allosteric enhancer PD-81723 protects against renal ischemia-reperfusion injury. Am J Physiol Renal Physiol. 303: F721-32. 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. Am J Physiol Renal Physiol. 311 (2): F437-49. 9. Rabadi, M.M. <i>et al.</i> (2019) Peptidyl arginine deiminase-4 exacerbates ischemic AKI by finding NEMO. Am J Physiol Renal Physiol. 316 (6): F1180-F1190. 10. Han, S.J. <i>et al.</i> (2020) Renal proximal tubular NEMO plays a critical role in ischemic acute kidney injury. JCI Insight. 5 (19): e139246. 11. Ono, Y. <i>et al.</i> (2018) CD11c+ M1-like macrophages (Mϕs) but not CD206+ M2-like Mϕ are involved in folliculogenesis in mice ovary. Sci Rep. 8 (1): 8171. 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. Kidney Int. 98 (1): 76-87. 13. Rogato, F. <i>et al.</i> (2024) Leukemia cutis as a prominent clinical sign in a dog with acute myeloid leukemia. Vet Clin Pathol. 53 (4): 448-57.
Storage	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. This product is photosensitive and should be protected from light.

Guarantee 12 months from date of despatch

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Health And Safety Information Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1212A647>

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA6005A647\)](#)

Product inquiries: 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
'M408535:221013'

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