Datasheet: MCA1212F

BATCH NUMBER 174904

Description:	RAT IgG2a NEGATIVE CONTROL:FITC
Specificity:	RAT IgG2a NEGATIVE CONTROL
Format:	FITC
Product Type:	Negative/Isotype Control
Isotype:	IgG2a
Quantity:	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.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			1/10*

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 Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
FITC	490	525

Preparation

Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.09% sodium azide (NaN_3)
1% bovine serum albumin

Approx. Protein Concentrations

IgG concentration 0.1 mg/ml

Immunogen

Human lymphocytes.

RRID	AB_322675
Fusion Partners	Spleen cells from immunized DA rats were fused with cells of the rat Y3/Ag1.2.3. myeloma cell line.
Specificity	**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. Test results indicate Rat IgG2a Negative Control antibody is also suitable for use as a negative control with canine 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.
References	1. 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. 2. 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. 3. 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. 4. 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. 5. 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. 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. 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. 8. Rabadi, M. *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. 311 (2): F437-49. 9. Rabadi, M.M. *et al.* (2019) Peptidyl arginine deiminase-4 exacerbates ischemic AKI by finding NEMO. Am J Physiol Renal Physiol. 316 (6): F1180-F1190. 10. Han, S.J. *et al.* (2020) Renal proximal tubular NEMO plays a critical role in ischemic acute kidney injury. JCI Insight. 5 (19): e139246. 11. Ono, Y. *et al.* (2018) CD11c+ M1-like macrophages (Møs) but not CD206+ M2-like Mø are involved in folliculogenesis in mice ovary. Sci Rep. 8 (1): 8171. 12. Han, S.J. *et al.* (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. *et al.* (2024) Leukemia cutis as a prominent clinical sign in a dog with acute myeloid leukemia. Vet Clin Pathol. 53 (4): 448-57. 14. Gómez-López, A.R. *et al.* (2026) CD47-SIRPα Axis as a Target for Neuroprotection. Glia. 74 (12): e70242.

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
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA1212F
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

RAT IgG2a NEGATIVE CONTROL:FITC (MCA6005F)

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

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