

Datasheet: MCA947F

Description:	RAT ANTI MOUSE CD169:FITC
Specificity:	CD169
Other names:	SIALOADHESIN
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	MOMA-1
Isotype:	IgG2a
Quantity:	0.1 mg

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			▪	
Immunohistology - Frozen	▪			
Immunofluorescence	▪			

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

Species Cross Reactivity

Does not react with: Human, Rat

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 1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml
Immunogen	Stromal (reticular) elements from mouse lymph nodes.
External Database Links	<p>UniProt: Q62230 Related reagents</p> <p>Entrez Gene: 20612 Siglec1 Related reagents</p>
Synonyms	Sa, Sn
RRID	AB_322323
Fusion Partners	Spleen cells from hyperimmunized mice were fused with cells from the murine SP2/0 myeloma.
Specificity	<p>Rat anti Mouse CD169, clone MOMA-1 recognizes murine CD169, also known as sialoadhesin or Siglec-1. CD169 is a lectin-like receptor expressed by certain populations of macrophages including marginal zone metallophilic cells of the spleen, subcapsular macrophages of lymph nodes and stromal macrophages in bone marrow (Morris <i>et al.</i> 1991).</p> <p>CD169 is a ~185 kDa sialic acid binding receptor containing 17 immunoglobulin-like domains (Crocker <i>et al.</i> 1992). Expression of CD169 can be induced on macrophages in culture by a serum factor and further modulated by cytokine exposure (McWilliam <i>et al.</i> 1992).</p> <p>Rat anti mouse CD169, clone MOMA-1 has been used for the <i>in vivo</i> depletion of specific macrophage populations (Kraal <i>et al.</i> 1988).</p>
Histology Positive Control Tissue	Lymphoid tissue
References	<ol style="list-style-type: none"> Kraal, G. and Janse, M. (1986) Marginal metallophilic cells of the mouse spleen identified by a monoclonal antibody. Immunology. 58: 665-9. Oetke, C. <i>et al.</i> (2006) The antigen recognized by MOMA-I is sialoadhesin. Immunol Lett. 106: 96-98. Tumanov, A.V. <i>et al.</i> (2010) Cellular source and molecular form of TNF specify its distinct functions in organization of secondary lymphoid organs. Blood. 116 (18): 3456-64. Karlsson, M.C. <i>et al.</i> (2003) Macrophages control the retention and trafficking of B lymphocytes in the splenic marginal zone. J Exp Med. 198: 333-40. Kanayama, N. <i>et al.</i> (2005) Analysis of marginal zone B cell development in the mouse

- with limited B cell diversity: role of the antigen receptor signals in the recruitment of B cells to the marginal zone. [J Immunol. 174 \(3\): 1438-45.](#)
6. Höpken, U.E. *et al.* (2004) Distinct and overlapping roles of CXCR5 and CCR7 in B-1 cell homing and early immunity against bacterial pathogens. [J Leukoc Biol. 76 \(3\): 709-18.](#)
7. Ferguson, A.R. *et al.* (2004) Marginal zone B cells transport and deposit IgM-containing immune complexes onto follicular dendritic cells. [Int Immunol. 16 \(10\): 1411-22.](#)
8. Girkontaite, I. *et al.* (2004) The sphingosine-1-phosphate (S1P) lysophospholipid receptor S1P3 regulates MAdCAM-1+ endothelial cells in splenic marginal sinus organization. [J Exp Med. 200 \(11\): 1491-501.](#)
9. Acevedo-Suárez, C.A. *et al.* (2005) Uncoupling of anergy from developmental arrest in anti-insulin B cells supports the development of autoimmune diabetes. [J Immunol. 174 \(2\): 827-33.](#)
10. Birjandi, S.Z. *et al.* (2011) Alterations in marginal zone macrophages and marginal zone B cells in old mice. [J Immunol. 186: 3441-51.](#)
11. Bhattacharyya, S. *et al.* (2011) NFATc1 affects mouse splenic B cell function by controlling the calcineurin-NFAT signaling network. [J Exp Med. 208 \(4\): 823-39.](#)
12. Jang, I.K. *et al.* (2011) Growth-factor receptor-bound protein-2 (Grb2) signaling in B cells controls lymphoid follicle organization and germinal center reaction. [Proc Natl Acad Sci U S A. 108: 7926-31.](#)
13. Rehm, A. *et al.* (2011) Cooperative function of CCR7 and lymphotoxin in the formation of a lymphoma-permissive niche within murine secondary lymphoid organs. [Blood. 118 \(4\): 1020-33.](#)
14. Mattsson, J. *et al.* (2011) Complement activation and complement receptors on follicular dendritic cells are critical for the function of a targeted adjuvant. [J Immunol. 187: 3641-52.](#)
15. Whipple, E.C. *et al.* (2004) Analyses of the in vivo trafficking of stoichiometric doses of an anti-complement receptor 1/2 monoclonal antibody infused intravenously in mice. [J Immunol. 173 \(4\): 2297-306.](#)
16. Zhang, Z. *et al.* (2012) Notch-RBP-J-Independent Marginal Zone B Cell Development in IgH Transgenic Mice with V(H) Derived from a Natural Polyreactive Antibody. [PLoS One. 7: e38894.](#)
17. Matsuda T *et al.* (2015) The immunosenescence-related gene Zizimin2 is associated with early bone marrow B cell development and marginal zone B cell formation. [Immun Ageing. 12: 1.](#)
18. Funakoshi, S. *et al.* (2015) BILL-cadherin/cadherin-17 contributes to the survival of memory B cells. [PLoS One. 10 \(1\): e0117566.](#)
19. Xing Y *et al.* (2015) Positive Selection of Natural Poly-Reactive B Cells in the Periphery Occurs Independent of Heavy Chain Allelic Inclusion. [PLoS One. 10 \(5\): e0125747.](#)
20. Carnrot, C. *et al.* (2011) Marginal zone B cells are naturally reactive to collagen type II and are involved in the initiation of the immune response in collagen-induced arthritis. [Cell Mol Immunol. 8 \(4\): 296-304.](#)
21. Ding, Z. *et al.* (2016) IgE-mediated enhancement of CD4(+) T cell responses requires antigen presentation by CD8 α (-) conventional dendritic cells. [Sci Rep. 6: 28290.](#)
22. Bradford, B.M. *et al.* (2016) Prion pathogenesis is unaltered following down-regulation of SIGN-R1. [Virology. 497: 337-345.](#)
23. Awasthi, A. *et al.* (2010) Rap1b facilitates NK cell functions via IQGAP1-mediated

signalosomes. [J Exp Med. 207: 1923-38.](#)

24. Flores, M. *et al.* (2015) FcγRIIB prevents inflammatory type I IFN production from plasmacytoid dendritic cells during a viral memory response. [J Immunol. 194 \(9\): 4240-50.](#)

25. Oh, D.S. *et al.* (2017) Transient Depletion of CD169⁺ Cells Contributes to Impaired Early Protection and Effector CD8⁺ T Cell Recruitment against Mucosal Respiratory Syncytial Virus Infection. [Front Immunol. 8: 819.](#)

26. Bogie, J.F. *et al.* (2018) CD169 is a marker for highly pathogenic phagocytes in multiple sclerosis. [Mult Scler. 24 \(3\): 290-300.](#)

27. Tsai, C.Y. *et al.* (2018) Bystander inhibition of humoral immune responses by Epstein-Barr virus LMP1. [Int Immunol. 30 \(12\): 579-90.](#)

28. Groh, J. *et al.* (2021) Immune modulation attenuates infantile neuronal ceroid lipofuscinosis in mice before and after disease onset [Brain Communications. fcab047 \[Epub ahead of print\].](#)

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: 10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

Regulatory

For research purposes only

Related Products

Recommended Negative Controls

[RAT IgG2a NEGATIVE CONTROL:FITC \(MCA1212F\)](#)

Recommended Useful Reagents

[MOUSE SEROBLOCK FcR \(BUF041A\)](#)

[MOUSE SEROBLOCK FcR \(BUF041B\)](#)

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Email: antibody_sales_us@bio-rad.com

Worldwide

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: antibody_sales_uk@bio-rad.com

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_de@bio-rad.com

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)

'M385353:210513'

Printed on 29 Aug 2021