

Datasheet: MCA947GA BATCH NUMBER 152681

Description:	RAT ANTI MOUSE CD169			
Specificity:	CD169			
Other names:	SIALOADHESIN			
Format:	Purified			
Product Type:	Monoclonal Antibody			
Clone:	MOMA-1			
Isotype:	lgG2a			
Quantity:	0.1 mg			

Product Details

Product Form

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 <u>www.bio-rad-antibodies.com/protocols</u>.

		Yes	No	Not Determined	Suggested Dilution	
	Flow Cytometry			•		
	Immunohistology - Frozen	-				
	Immunohistology - Paraffin					
	ELISA			-		
	Immunoprecipitation			-		
	Western Blotting					
	Immunofluorescence	-				
	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	Mouse					
Species Cross Reactivity	Does not react with:Hum	an, Rat				

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

Purified IgG - liquid

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	Stromal (reticular) elements from mouse lymph nodes.
External Database Links	UniProt: Q62230 Related reagents Entrez Gene:
	20612 Siglec1 Related reagents
Synonyms	Sa, Sn
Fusion Partners	Spleen cells from hyperimmunized mice were fused with cells from the murine SP2/0 myeloma.
Specificity	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 metallophils of the spleen, subcapsular macrophages of lymph nodes and stromal macrophages in bone marrow (Morris <i>et al.</i> <u>1991</u>).
	CD169 is a ~185 kDa sialic acid binding receptor containing 17 immunoglobulin-like domains (<u>Crocker <i>et al.</i> 1992</u>). Expression of CD169 can be induced on macrophages in culture by a serum factor and further modulated by cytokine exposure (<u>McWilliam <i>et al.</i></u> 1992).
	Rat anti mouse CD169, clone MOMA-1 has been used for the <i>in vivo</i> depletion of specific macrophage populations (<u>Kraal <i>et al.</i> 1988</u>).
Histology Positive Control Tissue	Lymphoid tissue
References	 Kraal, G. and Janse, M. (1986) Marginal metallophilic cells of the mouse spleen identified by a monoclonal antibody. <u>Immunology. 58: 665-9.</u> Oetke, C. <i>et al.</i> (2006) The antigen recognized by MOMA-I is sialoadhesin. <u>Immunol Lett. 106: 96-98.</u> 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. <u>Blood. 116 (18): 3456-64.</u> Karlsson, M.C. <i>et al.</i> (2003) Macrophages control the retention and trafficking of B lymphocytes in the splenic marginal zone. <u>J Exp Med. 198: 333-40.</u> 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. <u>J Leukoc Biol. 76 (3): 709-18.</u>
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. <u>J Immunol. 174 (2):</u> 827-33.

10. Birjandi, S.Z. *et al.* (2011) Alterations in marginal zone macrophages and marginal zone B cells in old mice. <u>J Immunol. 186: 3441-51.</u>

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. <u>Proc Natl Acad</u> <u>Sci U S A. 108: 7926-31.</u>

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. <u>Blood. 118</u> (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: <u>3641-52</u>.

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. <u>J</u> 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. <u>PLoS</u> <u>One. 7: e38894.</u>

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. <u>Immun</u> Ageing. 12: 1.

18. Funakoshi, S. *et al.* (2015) BILL-cadherin/cadherin-17 contributes to the survival of memory B cells. <u>PLoS One. 10 (1): e0117566.</u>

19. Xing Y *et al.* (2015) Positive Selection of Natural Poly-Reactive B Cells in the Periphery Occurs Independent of Heavy Chain Allelic Inclusion. <u>PLoS One. 10 (5)</u>: <u>e0125747.</u>

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. <u>Cell Mol Immunol. 8 (4): 296-304.</u>

21. Ding, Z. *et al.* (2016) IgE-mediated enhancement of CD4(+) T cell responses requires antigen presentation by CD8 α (-) conventional dendritic cells. <u>Sci Rep. 6: 28290.</u>

22. Bradford, B.M. *et al.* (2016) Prion pathogenesis is unaltered following down-regulation of SIGN-R1. <u>Virology. 497: 337-345.</u>

23. Awasthi, A. *et al.* (2010) Rap1b facilitates NK cell functions via IQGAP1-mediated signalosomes. <u>J Exp Med. 207: 1923-38.</u>

	24. Flores, M. <i>et al.</i> (2015) FcγRIIB prevents inflammatory type I IFN production from	50		
	plasmacytoid dendritic cells during a viral memory response. J Immunol. 194 (9): 4240-	<u>50.</u>		
	25. Oh, D.S. <i>et al.</i> (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. <i>et al.</i> (2018) CD169 is a marker for highly pathogenic phagocytes in			
	multiple sclerosis. <u>Mult Scler. 24 (3): 290-300.</u>			
	27. Tsai, C.Y. <i>et al.</i> (2018) Bystander inhibition of humoral immune responses by			
	Epstein-Barr virus LMP1. Int Immunol. 30 (12): 579-90.			
	28. Groh, J. <i>et al.</i> (2021) Immune modulation attenuates infantile neuronal ceroid			
	lipofuscinosis in mice before and after disease onset Brain Communications. fcab047			
	[Epub ahead of print].			
Storage	Store at +4°C or at -20°C if preferred.			
	This product should be stored undiluted.			
	Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing	a		
	as this may denature the antibody. Should this product contain a precipitate we	5		
	recommend microcentrifugation before use.			
Guarantee	12 months from date of despatch			
Health And Safety	Material Safety Datasheet documentation #10040 available at:			
Information	https://www.bio-rad-antibodies.com/SDS/MCA947GA			
Information				

Related Products

Recommended Secondary Antibodies

Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71) <u>DyLight®550, DyLight®650</u> , <u>DyLight®800</u>			

North & South	Tel: +1 800 265 7376	Worldwide	Tel: +44 (0)1865 852 700	Europe	Tel: +49 (0) 89 8090 95 21
America	Fax: +1 919 878 3751		Fax: +44 (0)1865 852 739		Fax: +49 (0) 89 8090 95 50
	Email: antibody_sales_us@bi	o-rad.com	Email: antibody_sales_uk@bio	-rad.com	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 'M369209:200529'

© 2024 Bio-Rad Laboratories Inc | Legal | Imprint