

Datasheet: MCA343GA

Description:	MOUSE ANTI RAT CD169
Specificity:	CD169
Other names:	ED3
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	ED3
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	▪			1/500
Immunohistology - Frozen	▪			1/50 - 1/250
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting			▪	
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	Rat
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 0.5 mg/ml
Immunogen	Rat Spleen cell homogenate

Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the SP2/0-Ag 14 mouse myeloma cell line.
Specificity	Mouse anti rat CD169 antibody, clone ED3 recognises the rat CD169 cell surface antigen, a ~185 kDa molecule expressed by macrophages, predominately confined to lymphoid organs only. Monocytes and granulocytes are negative. No other cell types are positive. The most conspicuous property of ED3 is it stains marginal zone macrophages and marginal metallophils in the spleen very strongly. Furthermore, macrophages in (auto-immune) diseased tissues express the ED3 antigen. In healthy tissue no expression occurs. CD169 is a receptor for glycoconjugates containing sialic acid.
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	<ol style="list-style-type: none"> Dijkstra, C.D. <i>et al.</i> (1985) The heterogeneity of mononuclear phagocytes in lymphoid organs: distinct macrophage subpopulations in the rat recognized by monoclonal antibodies ED1, ED2 and ED3. Immunology. 54 (3): 589-99. van Rees, E.P. <i>et al.</i> (1985) The postnatal development of cell populations in the rat popliteal lymph node. An immunohistochemical study. Cell Tissue Res. 242 (2): 391-8. van den Berg, T.K. <i>et al.</i> (1992) Sialoadhesin on macrophages: its identification as a lymphocyte adhesion molecule. J Exp Med. 176 (3): 647-55. Fujita, E. <i>et al.</i> (2010) Statin Attenuates Experimental Anti-Glomerular Basement Membrane Glomerulonephritis Together with the Augmentation of Alternatively Activated Macrophages. Am J Pathol. 177: 1143-54. Savikko, J. <i>et al.</i> (2011) Early short-term imatinib treatment is sufficient to prevent the development of chronic allograft nephropathy. Nephrol Dial Transplant. 26 (9): 3026-32. Camelo, S. <i>et al.</i> (2006) Antigen from the anterior chamber of the eye travels in a soluble form to secondary lymphoid organs via lymphatic and vascular routes. Invest Ophthalmol Vis Sci. 47: 1039-46. Camelo, S. <i>et al.</i> (2004) The distribution of antigen in lymphoid tissues following its injection into the anterior chamber of the rat eye. J Immunol. 172: 5388-95. Savikko, J. <i>et al.</i> (2011) Early short-term imatinib treatment is sufficient to prevent the development of chronic allograft nephropathy. Nephrol Dial Transplant. 26: 3026-32. Richards, P.J. <i>et al.</i> (1999) Liposomal clodronate eliminates synovial macrophages, reduces inflammation and ameliorates joint destruction in antigen-induced arthritis. Rheumatology (Oxford). 38: 818-25. Lobato-Pascual, A. <i>et al.</i> (2013) Rat macrophage C-type lectin is an activating receptor expressed by phagocytic cells. PLoS One. 8: e57406. Allen, A.R. <i>et al.</i> (1999) Endothelial expression of VCAM-1 in experimental crescentic nephritis and effect of antibodies to very late antigen-4 or VCAM-1 on glomerular injury. J Immunol. 162: 5519-27. Homo-Delarche, F. <i>et al.</i> (2006) Islet inflammation and fibrosis in a spontaneous model of type 2 diabetes, the GK rat. Diabetes. 55: 1625-33. Ikezumi, Y. <i>et al.</i> (2000) An anti-CD5 monoclonal antibody ameliorates proteinuria and glomerular lesions in rat mesangioproliferative glomerulonephritis. Kidney Int. 58: 100-14. Nakamura, K. <i>et al.</i> (2002) Lymph node macrophages, but not spleen macrophages, express high levels of unmasked sialoadhesin: implication for the adhesive properties of macrophages <i>in vivo</i>. Glycobiology. 12: 209-16. Rintala, J.M. <i>et al.</i> (2016) Epidermal growth factor receptor inhibition with erlotinib ameliorates anti-Thy 1.1-induced experimental glomerulonephritis. J Nephrol. 29 (3): 359-65. Rintala, J.M. <i>et al.</i> (2016) Oral Platelet-Derived Growth Factor and Vascular Endothelial Growth Factor Inhibitor Sunitinib Prevents Chronic Allograft Injury in Experimental Kidney Transplantation Model. Transplantation. 100 (1): 103-10. Palin, N.K. <i>et al.</i> (2015) Intensive perioperative simvastatin treatment protects from chronic

kidney allograft injury. [Am J Nephrol. 41 \(4-5\): 383-91.](#)

18. Rintala, J.M. *et al.* (2014) Epidermal growth factor inhibition, a novel pathway to prevent chronic allograft injury. [Transplantation. 98 \(8\): 821-7.](#)

19. Gonçalves J *et al.* (2016) Potential of mannan or dextrin nanogels as vaccine carrier/adjuvant systems [Journal of Bioactive and Compatible Polymers. Mar 14 \[Epub ahead of print\]](#)

20. Gonçalves J *et al.* (2017) Extended-access methamphetamine self-administration elicits neuroinflammatory response along with blood-brain barrier breakdown. [Brain Behav Immun. Feb 24. pii: S0889-1591\(17\)30058-2. \[Epub ahead of print\]](#)

21. Palin, N.K. *et al.* (2017) Activin inhibition limits early innate immune response in rat kidney allografts-a pilot study. [Transpl Int. 30 \(1\): 96-107.](#)

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 as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life

18 months from date of despatch.

Health And Safety Information

Material Safety Datasheet documentation #10040 available at:
10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR76...) [RPE](#)
Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)
Goat Anti Mouse IgG (STAR77...) [HRP](#)
Rabbit Anti Mouse IgG (STAR12...) [RPE](#)
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)
Rabbit Anti Mouse IgG (STAR8...) [DyLight®800](#)
Goat Anti Mouse IgG (STAR70...) [FITC](#)
Human Anti Mouse IgG2a (HCA037...) [FITC](#), [HRP](#)
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®549](#),
[DyLight®649](#), [DyLight®680](#), [DyLight®800](#),
[FITC](#), [HRP](#)

Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL \(MCA1210\)](#)

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