# Datasheet: MCA343R

## BATCH NUMBER 1708

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| **Description:** | MOUSE ANTI RAT CD169 |
| **Specificity:** | CD169 |
| **Other names:** | ED3 |
| **Format:** | Purified |
| **Product Type:** | Monoclonal Antibody |
| **Clone:** | ED3 |
| **Isotype:** | IgG2a |
| **Quantity:** | 0.25 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.

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| **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 |

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| **Carrier Free** | Yes |
| **Approx. Protein Concentrations** | IgG concentration 0.5 mg/ml |
| **Immunogen** | Rat Spleen cell homogenate |
| **RRID** | AB_2189149 |
| **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 conspicious 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** | 1. Dijkstra, C.D. *et al.* (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.<br>2. van Rees, E.P. *et al.* (1985) The postnatal development of cell populations in the rat popliteal lymph node. An immunohistochemical study. Cell Tissue Res. 242 (2): 391-8.<br>3. van den Berg, T.K. *et al.* (1992) Sialoadhesin on macrophages: its identification as a lymphocyte adhesion molecule. J Exp Med. 176 (3): 647-55.<br>4. Fujita, E. *et al.* (2010) Statin Attenuates Experimental Anti-Glomerular Basement Membrane Glomerulonephritis Together with the Augmentation of Alternatively Activated Macrophages. Am J Pathol. 177: 1143-54.<br>5. Savikko, J. *et al.* (2011) Early short-term imatinib treatment is sufficient to prevent the development of chronic allograft nephropathy. Nephrol Dial Transplant. 26 (9): 3026-32.<br>6. Camelo, S. *et al.* (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.<br>7. Camelo, S. *et al.* (2004) The distribution of antigen in lymphoid tissues following its injection into the anterior chamber of the rat eye. J Immunol. 172: 5388-95.<br>8. Savikko, J. *et al.* (2011) Early short-term imatinib treatment is sufficient to prevent the development of chronic allograft nephropathy. Nephrol Dial Transplant. 26: 3026-32.<br>9. Richards, P.J. *et al.* (1999) Liposomal clodronate eliminates synovial macrophages, reduces inflammation and ameliorates joint destruction in antigen-induced arthritis. Rheumatology (Oxford). 38: 818-25.<br>10. Lobato-Pascual, A. *et al.* (2013) Rat macrophage C-type lectin is an activating receptor expressed by phagocytic cells. PLoS One. 8: e57406.<br>11. Allen, A.R. *et al.* (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 |

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17. Palin, N.K. *et al.* (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. 62: 306-317.
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.

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| **Storage** | Store at +4°C or at -20°C if preferred.<br><br>This product should be stored undiluted.<br><br>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. |
| **Guarantee** | 12 months from date of despatch |
| **Health And Safety Information** | Material Safety Datasheet documentation #10040 available at:<br>https://www.bio-rad-antibodies.com/SDS/MCA343R<br>10040 |
| **Regulatory** | For research purposes only |

## Related Products

### Recommended Secondary Antibodies

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| Rabbit Anti Mouse IgG (STAR12...) | RPE |

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| Goat Anti Mouse IgG IgA IgM (STAR87...) | HRP |
| Goat Anti Mouse IgG (STAR76...) | RPE |
| Rabbit Anti Mouse IgG (STAR13...) | HRP |
| Goat Anti Mouse IgG (STAR70...) | FITC |
| Goat Anti Mouse IgG (H/L) (STAR117...) | Alk. Phos., DyLight®488, DyLight®550, DyLight®650, DyLight®680, DyLight®800, FITC, HRP |
| Rabbit Anti Mouse IgG (STAR9...) | FITC |
| Goat Anti Mouse IgG (STAR77...) | HRP |
| Goat Anti Mouse IgG (Fc) (STAR120...) | FITC, HRP |

## Recommended Negative Controls

MOUSE IgG2a NEGATIVE CONTROL (MCA1210)


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

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