

Datasheet: MCA620R

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| Description: | MOUSE ANTI RAT CD172a |
| Specificity: | CD172a |
| Other names: | SIRP ALPHA |
| Format: | Purified |
| Product Type: | Monoclonal Antibody |
| Clone: | ED9 |
| Isotype: | IgG1 |
| 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 | ▪ | | | 1/10 - 1/50 |
| Immunohistology - Frozen (1) | ▪ | | | 1/100 - 1/1000 |
| Immunohistology - Paraffin | | ▪ | | |
| Immunohistology - Resin | | ▪ | | |
| ELISA | | | ▪ | |
| Immunoprecipitation | ▪ | | | |
| Western Blotting | ▪ | | | |

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.

(1)The epitope recognised by this antibody is reported to be sensitive to formaldehyde fixation and tissue processing. Bio-Rad recommends the use of acetone fixation for frozen sections.

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| Target Species | Rat |
| Product Form | Purified IgG - liquid |
| Preparation | Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant |

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|---------------------------------------|---|
| Buffer Solution | Phosphate buffered saline |
| Preservative Stabilisers | 0.09% Sodium Azide (NaN ₃) |
| Carrier Free | Yes |
| Approx. Protein Concentrations | IgG concentration 1.0 mg/ml |
| Immunogen | Spleen cell homogenate. |
| External Database Links | <p>UniProt: P97710 Related reagents</p> <p>Entrez Gene: 25528 Sirpa Related reagents</p> |
| Synonyms | Bit, Mfr, Ptpns1, Shps1, Sirp |
| RRID | AB_323093 |
| Fusion Partners | Spleen cells from immunised mice were fused with cells of the Sp2/0 Ag-14 myeloma cell line. |
| Specificity | <p>Mouse anti Rat CD172a antibody, clone ED9 recognizes rat Tyrosine-protein phosphatase non-receptor type substrate 1, also known as CD172a, Signal-regulatory protein alpha-1, SIRPα -1, SHP substrate 1, Macrophage membrane protein MFP150 or Macrophage fusion receptor. CD172a is a 509 amino acid ~56 kDa single pass type 1 transmembrane glycoprotein expressed selectively by myeloid cells and by neurons (UniProt: P97710). Mouse anti Rat CD172a antibody, clone ED9 has been reported to bind to an alternative epitope to another anti CD172 antibody, clone OX-41 (Adams et al. 1998) and has been reported to block the interaction of CD172a - CD47 (de Vries et al. 2002).</p> |
| Flow Cytometry | Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul. |
| References | <ol style="list-style-type: none"> 1. Damoiseaux, J.G. <i>et al.</i> (1989) Rat bone marrow and monocyte cultures: influence of culture time and lymphokines on the expression of macrophage differentiation antigens. J Leukoc Biol. 46 (3): 246-53. 2. Damoiseaux, J.G. <i>et al.</i> (1989) Heterogeneity of macrophages in the rat evidenced by variability in determinants: two new anti-rat macrophage antibodies against a heterodimer of 160 and 95 kd (CD11/CD18). J Leukoc Biol. 46 (6): 556-64. 3. Adams, S. <i>et al.</i> (1998) Signal-regulatory protein is selectively expressed by myeloid and neuronal cells. J Immunol. 161 (4): 1853-9. 4. DeVries, H.E. <i>et al.</i> (2002) Signal-regulatory protein alpha-CD47 interactions are required for the transmigration of monocytes across cerebral endothelium. J Immunol. 168 (11): 5832-9. |

5. Blackbeard, J. *et al.* (2007) Quantification of the rat spinal microglial response to peripheral nerve injury as revealed by immunohistochemical image analysis and flow cytometry. [J Neurosci Methods. 164 \(2\): 207-17.](#)
6. Bode, U. *et al.* (2008) Dendritic cell subsets in lymph nodes are characterized by the specific draining area and influence the phenotype and fate of primed T cells. [Immunology. 123 \(4\): 480-90.](#)
7. Chang, J.C. *et al.* (2019) Early Immune Response to Acute Gastric Fluid Aspiration in a Rat Model of Lung Transplantation. [Exp Clin Transplant. 17 \(1\): 84-92.](#)
8. Holler, J. *et al.* (2008) Neuropeptide Y is expressed by rat mononuclear blood leukocytes and strongly down-regulated during inflammation. [J Immunol. 181 \(10\): 6906-12.](#)

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.

Guarantee 12 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

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| Goat Anti Mouse IgG (STAR77...) | HRP |
| Rabbit Anti Mouse IgG (STAR12...) | RPE |
| Rabbit Anti Mouse IgG (STAR8...) | DyLight®800 |
| Goat Anti Mouse IgG (STAR76...) | RPE |
| Rabbit Anti Mouse IgG (STAR9...) | FITC |
| Goat Anti Mouse IgG (Fc) (STAR120...) | FITC , HRP |
| Goat Anti Mouse IgG IgA IgM (STAR87...) | Alk. Phos. , HRP |
| Rabbit Anti Mouse IgG (STAR13...) | HRP |
| Goat Anti Mouse IgG (H/L) (STAR117...) | Alk. Phos. , DyLight®488 , DyLight®680 , DyLight®800 , FITC , HRP |
| Goat Anti Mouse IgG (STAR70...) | FITC |

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA1209\)](#)

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|----------------------------------|---|------------------|---|---------------|---|
| North & South America | Tel: +1 800 265 7376 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 |
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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M381467:210512'

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