

## Datasheet: MCA620PE

**BATCH NUMBER 169552**

<b>Description:</b>	MOUSE ANTI RAT CD172a:RPE
<b>Specificity:</b>	CD172a
<b>Other names:</b>	SIRP ALPHA
<b>Format:</b>	RPE
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	ED9
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	100 TESTS

### 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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat - 1/5

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.

<b>Target Species</b>	Rat		
<b>Product Form</b>	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized		
<b>Reconstitution</b>	Reconstitute with 1 ml distilled water		
<b>Max Ex/Em</b>	<b>Fluorophore</b>	<b>Excitation Max (nm)</b>	<b>Emission Max (nm)</b>
	RPE 488nm laser	496	578
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant		
<b>Buffer Solution</b>	Phosphate buffered saline		
<b>Preservative</b>	0.09% Sodium Azide		
<b>Stabilisers</b>	1% Bovine Serum Albumin		

5% Sucrose

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<b>Immunogen</b>	Spleen cell homogenate.
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<b>External Database Links</b>	<b>UniProt:</b> <a href="#">P97710</a> <a href="#">Related reagents</a>
	<b>Entrez Gene:</b> <a href="#">25528</a> Sirpa <a href="#">Related reagents</a>

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<b>Synonyms</b>	Bit, Mfr, Ptpns1, Shps1, Sirp
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<b>RRID</b>	AB_322316
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<b>Fusion Partners</b>	Spleen cells from immunised mice were fused with cells of the Sp2/0 Ag-14 myeloma cell line.
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<b>Specificity</b>	<b>Mouse anti Rat CD172a antibody, clone ED9</b> recognizes rat Tyrosine-protein phosphatase non-receptor type substrate 1, also known as CD172a, Signal-regulatory protein alpha-1, SIRP $\alpha$ -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 ( <a href="#">UniProt: P97710</a> ). Mouse anti Rat CD172a antibody, clone ED9 has been reported to bind to an alternative epitope to another anti CD172 antibody, clone OX-41 ( <a href="#">Adams et al. 1998</a> ) and has been reported to block the interaction of CD172a - CD47 ( <a href="#">de Vries et al. 2002</a> ).
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<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
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<b>References</b>	<ol style="list-style-type: none"><li>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. <a href="#">J Leukoc Biol. 46 (3): 246-53.</a></li><li>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). <a href="#">J Leukoc Biol. 46 (6): 556-64.</a></li><li>3. Adams, S. <i>et al.</i> (1998) Signal-regulatory protein is selectively expressed by myeloid and neuronal cells. <a href="#">J Immunol. 161 (4): 1853-9.</a></li><li>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. <a href="#">J Immunol. 168 (11): 5832-9.</a></li><li>5. Blackbeard, J. <i>et al.</i> (2007) Quantification of the rat spinal microglial response to peripheral nerve injury as revealed by immunohistochemical image analysis and flow cytometry. <a href="#">J Neurosci Methods. 164 (2): 207-17.</a></li><li>6. Bode, U. <i>et al.</i> (2008) Dendritic cell subsets in lymph nodes are characterized by the specific draining area and influence the phenotype and fate of primed T cells. <a href="#">Immunology. 123 (4): 480-90.</a></li><li>7. Chang, J.C. <i>et al.</i> (2019) Early Immune Response to Acute Gastric Fluid Aspiration in a</li></ol>
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- 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.](#)
9. Schmiedl, A. *et al.* (2021) Lung development and immune status under chronic LPS exposure in rat pups with and without CD26/DPP4 deficiency. [Cell Tissue Res. Oct 04 \[Epub ahead of print\].](#)
10. Guiteras, J. *et al.* (2021) Dual and Opposite Costimulatory Targeting with a Novel Human Fusion Recombinant Protein Effectively Prevents Renal Warm Ischemia Reperfusion Injury and Allograft Rejection in Murine Models. [Int J Mol Sci. 22 \(3\): 1216.](#)

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**Storage** Prior to reconstitution store at +4°C. Following reconstitution store at +4°C.

DO NOT FREEZE.

This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #20487 available at: <https://www.bio-rad-antibodies.com/SDS/MCA620PE>

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**Regulatory** For research purposes only

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## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA1209PE\)](#)

**Product inquiries:** [www.bio-rad-antibodies.com/technical-support](http://www.bio-rad-antibodies.com/technical-support)

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](http://bio-rad-antibodies.com/datasheets)  
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