

Datasheet: MCA620PE

Description:	MOUSE ANTI RAT CD172a:RPE
Specificity:	CD172a
Other names:	SIRP ALPHA
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	ED9
Isotype:	IgG1
Quantity:	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.

	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.

Target Species	Rat		
Product Form	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized		
Reconstitution	Reconstitute with 1 ml distilled water		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	RPE 488nm laser	496	578
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% Sodium Azide		
Stabilisers	1%	Bovine Serum Albumin	
	5%	Sucrose	

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_322316
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 epitpe 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. <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. J Neurosci Methods. 164 (2): 207-17. 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. Immunology. 123 (4): 480-90. 7. Chang, J.C. <i>et al.</i> (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. <i>et al.</i> (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 \[Epub ahead of print\].](#)

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.

Guarantee

12 months from date of despatch

Health And Safety Information

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

Regulatory

For research purposes only

Related Products

Recommended Negative Controls

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

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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](https://www.bio-rad-antibodies.com/datasheets)

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