

Datasheet: MCA620F

BATCH NUMBER 158544

Description:	MOUSE ANTI RAT CD172a:FITC
Specificity:	CD172a
Other names:	SIRP ALPHA
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	ED9
Isotype:	IgG1
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	▪			Neat - 1/10

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 Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	FITC	490	525
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		
Approx. Protein	IgG concentration 0.1 mg/ml		

Concentrations

Immunogen Spleen cell homogenate.

External Database Links

UniProt:

[P97710](#) [Related reagents](#)

Entrez Gene:

[25528](#) Sirpa [Related reagents](#)

Synonyms Bit, Mfr, Ptpns1, Shps1, Sirp

RRID AB_322315

Fusion Partners Spleen cells from immunised mice were fused with cells of the Sp2/0 Ag-14 myeloma cell line.

Specificity **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, SIRP α -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](#)).

Flow Cytometry Use 10ul of the suggested working dilution to label 10⁶ cells or 100ul whole blood.

References

1. Damoiseaux, J.G. *et al.* (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. *et al.* (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. *et al.* (1998) Signal-regulatory protein is selectively expressed by myeloid and neuronal cells. [J Immunol. 161 \(4\): 1853-9.](#)
4. DeVries, H.E. *et al.* (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.](#)
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.](#)

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. This product is photosensitive and should be protected from light.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA620F>

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:FITC \(MCA1209F\)](#)

Product inquiries: 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
'M384627:210513'

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