Datasheet: MCA620F

BATCH NUMBER L1705

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 Stabilisers

0.09% Sodium Azide
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&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 (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 10^6 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.

Storage	Store at +4°C or at -20°C if preferred. This product should be stored undiluted. Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light. 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 #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

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