Datasheet: MCA2389A488

BATCH NUMBER 166467

Description:	RAT ANTI MOUSE Ly-6C:Alexa Fluor® 488
Specificity:	Ly-6C
Other names:	Lymphocyte antigen 6C2
Format:	ALEXA FLUOR® 488
Product Type:	Monoclonal Antibody
Clone:	ER-MP20
Isotype:	IgG2a
Quantity:	100 TESTS/1ml

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 product 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 product for use in their own system using appropriate negative/positive controls.

Target Species

Mouse

Product Form

Purified IgG conjugated to Alexa Fluor® 488 - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
Alexa Fluor®488	495	519

Preparation

Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.09% sodium azide (NaN_3)
1% bovine serum albumin

Approx. Protein

IgG concentration 0.05 mg/ml

Concentrations	
Immunogen	Balb/c macrophage precursor cell hybrids.
External Database Links	**UniProt:** P0CW03 Related reagents
RRID	AB_2137342
Fusion Partners	Spleen cells from immunized rats were fused with cells of the Y3-Ag1.2.3 myeloma cell line.
Specificity	**Rat anti Mouse Ly-6C antibody, clone ER-MP20** recognizes murine Ly-6C, a 131 amino acid ~14 kDa differentiation antigen, expressed on macrophage/dendritic cell precursors in mid-stage development (late CFU-M, monoblasts and immature monocytes), granulocytes, and on a wide range of endothelial cells and subpopulations of B- and T-lymphocytes. Rat anti Mouse Ly-6C antibody, clone ER-MP20 is able to distinguish multiple mouse blood monocyte subsets: immature Ly-6C^{hi} monocytes are recruited to acute peripheral inflammation and develop into Ly-6C^{+} exudate macrophages, whereas more mature Ly-6C$^{-/lo}$ monocytes are precursors for tissue macrophages and dendritic cells in steady state. Rat anti Mouse Ly-6C, clone ER-MP20 can be used in conjunction with clone ER-MP12 in two colour flow cytometric analysis, to identify different stages of myeloid progenitor cells in mouse bone marrow (Leenen *et al.* 1990). Rat anti Mouse Ly-6C was originally described as recognizing a protein encoded by the LY6C gene. It has subsequently become apparent that the LY6C locus demonstrates polymorphism and the LY6C gene has been re-designated LY6C2. The LY6C1 gene encodes a similar protein with ~95% sequence homology to LY6C2.
Flow Cytometry	Use 10µl of the suggested working dilution to label 10^6 cells in 100µl. The Fc region of monoclonal antibodies may bind to cells expressing low affinity Fc receptors. This may be reduced by using SeroBlock FcR (BUF041A/BUF041B).
References	1. Zhang, Y. & Bliska, J.B. (2010) YopJ-promoted cytotoxicity and systemic colonization are associated with high levels of murine interleukin-18, gamma interferon, and neutrophils in a live vaccine model of *Yersinia pseudotuberculosis* infection. Infect Immun 78: 2329-41. 2. Leenen, P.J. *et al.* (1990) Murine macrophage precursor characterization. II. Monoclonal antibodies against macrophage precursor antigens. Eur J Immunol. 20 (1): 27-34. 3. de Bruijn, M.F. *et al.* (1998) Bone marrow cellular composition in Listeria monocytogenes infected mice detected using ER-MP12 and ER-MP20 antibodies: a flow cytometric alternative to differential counting. J Immunol Methods. 217 (1-2): 27-39. 4. Schatteman, G.C. *et al.* (2010) Lin- Cells Mediate Tissue Repair by Regulating

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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
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Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA2389A488 10041
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

RAT IgG2a NEGATIVE CONTROL:Alexa Fluor® 488 (MCA1212A488)

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A)
HUMAN SEROBLOCK (BUF070B)

Email: antibody_sales_us@bio-rad.com Email: antibody_sales_uk@bio-rad.com Email: antibody_sales_de@bio-rad.com

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