

## Datasheet: MCA2389B

**BATCH NUMBER 165770**

<b>Description:</b>	RAT ANTI MOUSE Ly-6C:Biotin
<b>Specificity:</b>	Ly-6C
<b>Other names:</b>	Lymphocyte antigen 6C2
<b>Format:</b>	Biotin
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	ER-MP20
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat - 1/50

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.

<b>Target Species</b>	Mouse
<b>Product Form</b>	Purified IgG conjugated to biotin - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative</b>	0.09% sodium azide (NaN <sub>3</sub> )
<b>Stabilisers</b>	1% bovine serum albumin
<b>Approx. Protein Concentrations</b>	IgG concentration 0.1 mg/ml
<b>Immunogen</b>	Balb/c macrophage precursor cell hybrids.

<b>External Database Links</b>	<b>UniProt:</b> <a href="#">P0CW03</a> <a href="#">Related reagents</a>
<b>RRID</b>	AB_844550
<b>Fusion Partners</b>	Spleen cells from immunized rats were fused with cells of the Y3-Ag1.2.3 myeloma cell line.
<b>Specificity</b>	<p><b>Rat anti Mouse Ly-6C antibody, clone ER-MP20</b> 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.</p> <p>Rat anti Mouse Ly-6C antibody, clone ER-MP20 is able to distinguish multiple mouse blood monocyte subsets: immature Ly-6C<sup>hi</sup> monocytes are recruited to acute peripheral inflammation and develop into Ly-6C<sup>+</sup> exudate macrophages, whereas more mature Ly-6C<sup>lo</sup> monocytes are precursors for tissue macrophages and dendritic cells in steady state.</p> <p>Rat anti Mouse Ly-6C, clone ER-MP20 can be used in conjunction with clone <a href="#">ER-MP12</a> in two colour flow cytometric analysis, to identify different stages of myeloid progenitor cells in mouse bone marrow (<a href="#">Leenen et al. 1990</a>).</p> <p>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 <a href="#">LY6C2</a>. The <a href="#">LY6C1</a> gene encodes a similar protein with ~95% sequence homology to LY6C2.</p>
<b>Flow Cytometry</b>	<p>Use 10µl of the suggested working dilution to label 10<sup>6</sup> cells in 100µl.</p> <p>The Fc region of monoclonal antibodies may bind to cells expressing low affinity Fc receptors. This may be reduced by using SeroBlock FcR (<a href="#">BUF041A/BUF041B</a>).</p>
<b>References</b>	<ol style="list-style-type: none"> <li>Zhang, Y. &amp; 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 <i>Yersinia pseudotuberculosis</i> infection. <a href="#">Infect Immun 78: 2329-41.</a></li> <li>Leenen, P.J. <i>et al.</i> (1990) Murine macrophage precursor characterization. II. Monoclonal antibodies against macrophage precursor antigens. <a href="#">Eur J Immunol. 20 (1): 27-34.</a></li> <li>de Bruijn, M.F. <i>et al.</i> (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. <a href="#">J Immunol Methods. 217 (1-2): 27-39.</a></li> <li>Schatteman, G.C. <i>et al.</i> (2010) Lin- Cells Mediate Tissue Repair by Regulating MCP-1/CCL-2. <a href="#">Am J Pathol. 177: 2002-10.</a></li> <li>Baumeister, T. <i>et al.</i> (2003) Interleukin-3Ralpha+ myeloid dendritic cells and mast cells develop simultaneously from different bone marrow precursors in cultures with interleukin-3. <a href="#">J Invest Dermatol. 121: 280-8.</a></li> </ol>

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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.

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**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/MCA2389B>  
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**Regulatory** For research purposes only

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