

Datasheet: MCA2389SBB580

Description:	RAT ANTI MOUSE Ly-6C:StarBright Blue 580
Specificity:	Ly-6C
Other names:	Lymphocyte antigen 6C2
Format:	StarBright Blue 580
Product Type:	Monoclonal Antibody
Clone:	ER-MP20
Isotype:	IgG2a
Quantity:	100 TESTS/0.5ml

### **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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	<b>Suggested Dilution</b>
Flow Cytometry				Neat

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 conjuga	ted to StarBright Blue 5	580 - liquid
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm
	StarBright Blue 580	475	582
Preparation	Purified IdG prepare	d b <b>eff</b> icite. about a to a	ranky an Bratain C
	supernatant	d by affinity chromatog	raphy on Protein G
Buffer Solution			raphy on Protein G
	supernatant	saline	raphy on Protein G
Buffer Solution  Preservative Stabilisers	supernatant  Phosphate buffered	saline (NaN <sub>3</sub> )	raphy on Protein G
Preservative	Phosphate buffered : 0.09% sodium azide	saline (NaN <sub>3</sub> )	raphy on Protein G
Preservative	supernatant  Phosphate buffered solution of the control of the con	saline (NaN <sub>3</sub> )	raphy on Protein G

Immunogen	Balb/c macrophage precursor cell hybrids.
External Database Links	UniProt: P0CW03 Related reagents
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 <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.
	Rat anti Mouse Ly-6C, clone ER-MP20 can be used in conjunction with clone <u>ER-MP12</u> in two colour flow cytometric analysis, to identify different stages of myeloid progenitor cells in mouse bone marrow ( <u>Leenen <i>et al.</i> 1990</u> ).
	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 5µl of the suggested working dilution to label 10 <sup>6</sup> cells in 100µl. Best practices suggest a 5 minutes centrifugation at 6,000g prior to sample application.
References	<ol> <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. Infect Immun 78: 2329-41.</li> <li>Leenen, P.J. et al. (1990) Murine macrophage precursor characterization. II. Monoclonal antibodies against macrophage precursor antigens. Eur J Immunol. 20 (1): 27-34.</li> <li>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.</li> <li>Schatteman, G.C. et al. (2010) Lin- Cells Mediate Tissue Repair by Regulating MCP-1/CCL-2. Am J Pathol. 177: 2002-10.</li> <li>Baumeister, T. et al. (2003) Interleukin-3Ralpha+ myeloid dendritic cells and mast cells</li> </ol>

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Storage	Store at +4°C.  DO NOT FREEZE.  This product should be stored undiluted.
Guarantee	12 months from date of despatch
Acknowledgements	This product is covered by U.S. Patent No. 10,150,841 and related U.S. and foreign counterparts
Health And Safety Information	Material Safety Datasheet documentation #20471 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2389SBB580">https://www.bio-rad-antibodies.com/SDS/MCA2389SBB580</a> 20471
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