

# Datasheet: MCA2389SBB765

Description:	RAT ANTI MOUSE Ly-6C:StarBright Blue 765
Specificity:	Ly-6C
Other names:	Lymphocyte antigen 6C2
Format:	StarBright Blue 765
Product Type:	Monoclonal Antibody
Clone:	ER-MP20
Isotype:	lgG2a
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 <u>www.bio-rad-antibodies.com/protocols</u> .					
		Yes	No	Not Determined	Suggested Dilution	
	Flow Cytometry	•			Neat	
	Where this product has necessarily exclude its a guide only. It is recor system using appropria	use in such p nmended that	procedur the use	es. Suggested working r titrates the product f	g dilutions are given as	
Target Species	Mouse					
Product Form	Purified IgG conjugated to StarBright Blue 765 - liquid					
Max Ex/Em	Fluorophore	Excitation Ma	ıx (nm)	Emission Max (nm)		
	StarBright Blue 765	476		764		
Preparation	Purified IgG prepared I supernatant	by affinity chro	omatogra	aphy on Protein G fror	n tissue culture	
Buffer Solution	Phosphate buffered sa	line				
Preservative	0.09% sodium azide (NaN <sub>3</sub> )					
Stabilisers	1% bovine serum albumin					
	0.1% Pluronic F68					
	0.1% PEG 3350					
	0.05% Tween 20					

Immunogen	Balb/c macrophage precursor cell hybrids.			
External Database Links	UniProt: <u>P0CW03</u> <u>Related reagents</u>			
Fusion Partners	Spleen cells from immunized rats were fused with cells of the Y3-Ag1.2.3 myeloma cell line.			
Specificity	<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.			
	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 <u>LY6C2</u> . The <u>LY6C1</u> 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. <i>et al.</i> (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. <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. J Immunol Methods. 217 (1-2): 27-39.</li> <li>Schatteman, G.C. <i>et al.</i> (2010) Lin- Cells Mediate Tissue Repair by Regulating MCP-1/CCL-2. Am J Pathol. 177: 2002-10.</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. J Invest Dermatol. 121: 280-8.</li> <li>Devey, L. <i>et al.</i> (2009) Tissue-resident macrophages protect the liver from ischemia</li> </ol>			

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	receptor ameliorates murine acute graft-versus-host disease. 44. Cardona, S.M. <i>et al.</i> (2018) Role of the Fractalkine Recep Inflammation: New Approach Utilizing a Mouse Model Express CX3CR1(I249/M280) Variant. <u>Front Cell Neurosci. 12: 365.</u>	tor in CNS Autoimmune
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 re counterparts	lated U.S. and foreign
Health And Safety Information	Material Safety Datasheet documentation #20471 available at <a href="https://www.bio-rad-antibodies.com/SDS/MCA2389SBB765">https://www.bio-rad-antibodies.com/SDS/MCA2389SBB765</a> 20471	:
Regulatory	For research purposes only	

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#### **Recommended Useful Reagents**

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