

## Datasheet: MCA756SBB700

Description:	MOUSE ANTI HUMAN CD64:StarBright Blue 700
Specificity:	CD64
Other names:	FcRI
Format:	StarBright Blue 700
Product Type:	Monoclonal Antibody
Clone:	10.1
lsotype:	lgG1
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 N	lot Determined	Suggested Dilution
	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	Human				
Species Cross Reactivity	Reacts with: Baboon, Cynomolgus monkey, Rhesus Monkey <b>N.B.</b> Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.				
Product Form	Purified IgG conjugated to StarBright Blue 700 - liquid				
Max Ex/Em	Fluorophore	Excitation Ma	x (nm) Emi	ssion Max (nm)	
	StarBright Blue 700	473		703	
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant				
Buffer Solution	Phosphate buffered sa	aline			

Preservative Stabilisers	0.09% Sodium Azide (NaN <sub>3</sub> ) 1% Bovine Serum Albumin 0.1% Pluronic F68 0.1% PEG 3350 0.05% Tween 20	
Immunogen	Human monocytes	
External Database Links	UniProt: <u>P12314</u> <u>Related reagents</u> Entrez Gene: <u>2209</u> FCGR1A <u>Related reagents</u>	
Synonyms	FCG1, FCGR1, IGFR1	
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse SP2/0-Ag14 myeloma cell line	
Specificity	Mouse anti Human CD64 antibody, clone 10.1 recognizes the human CD64 cell surface antigen, a ~75 kDa glycoprotein expressed by monocytes. The antigen acts as a high affinity receptor for human IgG, and is also known as FcRI. Mouse anti Human CD64 antibody, clone 10.1 blocks binding of immunoglobulin to FcRI.	Э
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>Scheinecker, C. <i>et al.</i> (1998) Initiation of the autologous mixed lymphocyte reaction requires the expression of costimulatory molecules B7-1 and B7-2 on human peripheral blood dendritic cells. <u>J Immunol. 161: 3966-73.</u></li> <li>Fadlon, E. <i>et al.</i> (1998) Blood polymorphonuclear leukocytes from the majority of sicklic cell patients in the crisis phase of the disease show enhanced adhesion to vascular endothelium and increased expression of CD64. <u>Blood. 91: 266-74.</u></li> <li>Navarro-López, F. <i>et al.</i> (2003) Late T-lymphocyte and monocyte activation in coronary restenosis. Evidence for a persistent inflammatory/immune mechanism? <u>Rev Esp Cardiol 56: 465-72.</u></li> <li>Beekman, J.M. <i>et al.</i> (2004) Direct interaction between FcgammaRI (CD64) and periplakin controls receptor endocytosis and ligand binding capacity. <u>Proc Natl Acad Sci U S A.101: 10392-7.</u></li> <li>Kahn, F. <i>et al.</i> (2008) Antibodies against a surface protein of Streptococcus pyogenes promote a pathological inflammatory response. <u>PLoS Pathog. 4</u> (9): e1000149.</li> <li>Wagner, C. <i>et al.</i> (2008) T lymphocytes in acute bacterial infection: increased prevalence of CD11b(+) cells in the peripheral blood and recruitment to the infected site. <u>Immunology. 125: 503-9.</u></li> <li>Eisenhardt, S.U. <i>et al.</i> (2009) Dissociation of pentameric to monomeric C-reactive</li> </ol>	<u>-</u>

	<ul> <li>protein on activated platelets localizes inflammation to atherose 105: 128-37.</li> <li>8. Tanaka, M. <i>et al.</i> (2009) Activation of Fc gamma RI on mono differentiation into immature dendritic cells that induce autoreau Immunol. 183: 2349-55.</li> <li>9. Liu M <i>et al.</i> (2011) Vitellogenin mediates phagocytosis throu Mol Immunol. 49 (1-2): 211-8.</li> <li>10. Fet, N.G. <i>et al.</i> (2012) Reduction of activated macrophages reperfusion injury diminishes oxidative stress and ameliorates to Transplant. 27 (8): 3149-55.</li> <li>11. Kapelski S <i>et al.</i> (2014) Assessment of the neutrophilic antiburst (ADRB) response to <i>Plasmodium falciparum</i>. J Leukoc B 12. Hristodorov, D. <i>et al.</i> (2016) Fully human MAP-fusion prote eliminates proliferating CD64(+) M1 macrophages. Immunol Cd 13. Loi, A.L.T. <i>et al.</i> (2017) Proteomic profiling of peripheral bloc two inflammatory phenotypes in stable COPD patients. Respir 14. Rahabi, M. <i>et al.</i> (2020) Divergent Roles for Macrophage C Dectin-1 and Mannose Receptors, in the Intestinal Inflammator (13): 4386-98.e5.</li> </ul>	bocytes triggers ctive T cell responses. <u>J</u> gh interaction with FcγR. s after ischaemia- renal damage. <u>Nephrol Dial</u> ibody-dependent respiratory <u>iol. 96 (6): 1131-42.</u> in selectively targets and <u>ell Biol. 94 (5): 470-8.</u> bod neutrophils identifies <u>Res. 18 (1): 100.</u> C-type Lectin Receptors,		
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 rel counterparts	ated U.S. and foreign		
Health And Safety Information	Material Safety Datasheet documentation #20471 available at: https://www.bio-rad-antibodies.com/SDS/MCA756SBB700 20471			
Regulatory	For research purposes only			
Related Product	S			
Recommended Useful Reagents				
HUMAN SEROBLOCK (E	<u>BUF070A)</u>			

HUMAN SEROBLOCK (BUF070B)

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To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M421948:230815'

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