Datasheet: MCA756AMO BATCH NUMBER 149434

Description:	MOUSE ANTI HUMAN CD64:Amethyst Orange			
Specificity:	CD64			
Other names:	FcRI			
Format:	Amethyst Orange			
Product Type:	Monoclonal Antibody			
Clone:	10.1			
lsotype:	lgG1			
Quantity:	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 <u>www.bio-rad-antibodies.com/protocols</u> .				
		Yes No	Not 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	Reacts with: Baboon, Cynomolgus monkey, Rhesus Monkey				
Reactivity	N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications				
	personal communicati further information.	ons from the origina	tors. Please refer to refe	erences indicated for	
Product Form	Purified IgG conjugated to Amethyst Orange - liquid				
Max Ex/Em	Fluorophore	Excitation Max (nm	Emission Max (nm)		
	Amethyst Orange	405	540		
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant				

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃) 1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml
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.
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul
References	 Dougherty, G.J. <i>et al.</i> (1987) The human mononuclear phagocyte high-affinity Fc receptor, FcRI, defined by a monoclonal antibody, 10.1. <u>Eur J Immunol. 17 (10): 1453-9.</u> 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> Tanaka, M. <i>et al.</i> (2009) Activation of Fc gamma RI on monocytes triggers differentiation into immature dendritic cells that induce autoreactive T cell responses. J <u>Immunol. 183: 2349-55.</u> Fet, N.G. <i>et al.</i> (2012) Reduction of activated macrophages after ischaemia-reperfusion injury diminishes oxidative stress and ameliorates renal damage. <u>Nephrol Dial Transplant.</u> 27 (8): 3149-55. 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> Eisenhardt, S.U. <i>et al.</i> (2009) Dissociation of pentameric to monomeric C-reactive protein on activated platelets localizes inflammation to atherosclerotic plaques. <u>Circ Res.</u> <u>105: 128-37.</u> Fadlon,. E. <i>et al.</i> (1998) Blood polymorphonuclear leukocytes from the majority of sickle

	 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> 8. 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> 9. 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> 10. Liu M <i>et al.</i> (2011) Vitellogenin mediates phagocytosis through interaction with FcγR. <u>Mol Immunol. 49 (1-2): 211-8.</u> 11. Kapelski S <i>et al.</i> (2014) Assessment of the neutrophilic antibody-dependent respiratory burst (ADRB) response to <i>Plasmodium falciparum.</i> <u>J Leukoc Biol. 96 (6): 1131-42.</u> 12. Loi, A.L.T. <i>et al.</i> (2017) Proteomic profiling of peripheral blood neutrophils identifies two inflammatory phenotypes in stable COPD patients. Respir Res. 18 (1): 100.
	 13. Hristodorov, D. <i>et al.</i> (2016) Fully human MAP-fusion protein selectively targets and eliminates proliferating CD64(+) M1 macrophages. <u>Immunol Cell Biol. 94 (5): 470-8.</u> 14. 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.
Further Reading	1. Yoshino, N. <i>et al.</i> (2000) Upgrading of flow cytometric analysis for absolute counts, cytokines and other antigenic molecules of Cynomolgus monkeys (<i>Macaca fascicularis</i>) by using anti-human cross-reactive antibodies. <u>Exp Anim. 49 (2): 97-110.</u>
Storage	Store at +4°C or at -20°C if preferred. Storage in frost-free freezers is not recommended. This product should be stored undiluted. This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA756AMO 10041
Regulatory	For research purposes only

Related Products

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)

North & South	Tel: +1 800 265 7376	Worldwide	Tel: +44 (0)1865 852 700	Europe	Tel: +49 (0) 89 8090 95 21
America	Fax: +1 919 878 3751		Fax: +44 (0)1865 852 739		Fax: +49 (0) 89 8090 95 50
	Email: antibody_sales_us@bio-ra	d.com	Email: antibody_sales_uk@bio-ra	ad.com	Email: antibody_sales_de@bio-rad.com

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