

Datasheet: MCA756F BATCH NUMBER 166587

Description:	MOUSE ANTI HUMAN CD64:FITC	
Specificity:	CD64	
Other names:	FcRI	
Format:	FITC	
Product Type:	Monoclonal Antibody	
Clone:	10.1	
Isotype:	lgG1	
Quantity:	0.1 mg	

supernatant

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.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	•			Neat - 1/10
Immunofluorescence	-			

Where this antibody 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 antibody for use in their own system using appropriate negative/positive controls.

Target Species	Human			
Species Cross Reactivity	N.B. Antibody rearreactivity is derive	ed from testing within our I nications from the originate	, Rhesus Monkey ions may vary between specie aboratories, peer-reviewed pul ors. Please refer to references	olications or
Product Form	Purified IgG conju	gated to Fluorescein Isotl	niocyanate Isomer 1 (FITC) - li	quid
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)	
	FITC	490	525	
Preparation	Purified IgG prepa	ared by affinity chromatog	raphy on Protein A from tissue	culture

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Buffer Solution	Phosphate buffered saline
Preservative	0.09% Sodium Azide
Stabilisers	1% Bovine Serum Albumin
Approx. Protein	IaC concentration 0.1 mg/ml
Concentrations	IgG concentration 0.1 mg/ml
•	
Immunogen	Human monocytes
External Database	
Links	UniProt:
	P12314 Related reagents
	Entrez Gene:
	2209 FCGR1A Related reagents
Synonyms	FCG1, FCGR1, IGFR1
RRID	AB_321799
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.
r low oytometry	Ose Tour of the suggested working dilution to laber To cells in Toodi.
References	1. Scheinecker, C. et al. (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. J Immunol. 161: 3966-73.
	2. 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</u> . 91: 266-74.
	3. Navarro-López, F. <i>et al.</i> (2003) Late T-lymphocyte and monocyte activation in coronary
	restenosis. Evidence for a persistent inflammatory/immune mechanism? Rev Esp Cardiol.
	56: 465-72.
	4. 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</u>
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	5. Kahn, F. <i>et al.</i> (2008) Antibodies against a surface protein of
	Streptococcus pyogenes promote a pathological inflammatory response. PLoS Pathog. 4
	(9): e1000149.
	6. Wagner, C. et al. (2008) T lymphocytes in acute bacterial infection: increased

prevalence of CD11b(+) cells in the peripheral blood and recruitment to the infected site. Immunology. 125: 503-9.

- 7. Eisenhardt, S.U. *et al.* (2009) Dissociation of pentameric to monomeric C-reactive protein on activated platelets localizes inflammation to atherosclerotic plaques. <u>Circ Res.</u> 105: 128-37.
- 8. Tanaka, M. *et al.* (2009) Activation of Fc gamma RI on monocytes triggers differentiation into immature dendritic cells that induce autoreactive T cell responses. <u>J Immunol.</u> 183: 2349-55.
- 9. Liu M *et al.* (2011) Vitellogenin mediates phagocytosis through interaction with FcγR. Mol Immunol. 49 (1-2): 211-8.
- 10. Fet, N.G. *et al.* (2012) Reduction of activated macrophages after ischaemia-reperfusion injury diminishes oxidative stress and ameliorates renal damage. <u>Nephrol Dial</u> Transplant. 27 (8): 3149-55.
- 11. Kapelski S *et al.* (2014) Assessment of the neutrophilic antibody-dependent respiratory burst (ADRB) response to *Plasmodium falciparum*. <u>J Leukoc Biol. 96 (6): 1131-42.</u>
- 12. Hristodorov, D. *et al.* (2016) Fully human MAP-fusion protein selectively targets and eliminates proliferating CD64(+) M1 macrophages. <u>Immunol Cell Biol. 94 (5): 470-8.</u>
- 13. Loi, A.L.T. *et al.* (2017) Proteomic profiling of peripheral blood neutrophils identifies two inflammatory phenotypes in stable COPD patients. Respir Res. 18 (1): 100.
- 14. Rahabi, M. *et al.* (2020) Divergent Roles for Macrophage C-type Lectin Receptors, Dectin-1 and Mannose Receptors, in the Intestinal Inflammatory Response. <u>Cell Rep. 30</u> (13): 4386-98.e5.

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.

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/MCA756F 10041
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:FITC (MCA928F)

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)

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

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