

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
Isotype:	IgG1
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 www.bio-rad-antibodies.com/protocols.

	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 Reactivity

Reacts with: Baboon, Cynomolgus monkey, Rhesus Monkey
N.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 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	<p>UniProt: P12314 Related reagents</p> <p>Entrez Gene: 2209 FCGR1A Related reagents</p>
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	<p>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.</p> <p>Mouse anti Human CD64 antibody, clone 10.1 blocks binding of immunoglobulin to FcRI.</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul
References	<ol style="list-style-type: none"> Dougherty, G.J. <i>et al.</i> (1987) The human mononuclear phagocyte high-affinity Fc receptor, FcRI, defined by a monoclonal antibody, 10.1. Eur J Immunol. 17 (10): 1453-9. Beekman, J.M. <i>et al.</i> (2004) Direct interaction between FcγRI (CD64) and periplakin controls receptor endocytosis and ligand binding capacity. Proc Natl Acad Sci U S A.101: 10392-7. 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 Immunol. 183: 2349-55. Fet, N.G. <i>et al.</i> (2012) Reduction of activated macrophages after ischaemia-reperfusion injury diminishes oxidative stress and ameliorates renal damage. Nephrol Dial Transplant. 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. Immunology. 125: 503-9. Eisenhardt, S.U. <i>et al.</i> (2009) Dissociation of pentameric to monomeric C-reactive protein on activated platelets localizes inflammation to atherosclerotic plaques. Circ Res. 105: 128-37. 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. [Blood. 91: 266-74.](#)
8. 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.](#)
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10. Liu M *et al.* (2011) Vitellogenin mediates phagocytosis through interaction with FcγR. [Mol Immunol. 49 \(1-2\): 211-8.](#)
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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. Exp Anim. 49 (2): 97-110.
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 \(BUF070B\)](#)

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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
'M360324:191106'

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