

## Datasheet: MCA756SBV790

<b>Description:</b>	MOUSE ANTI HUMAN CD64:StarBright Violet 790
<b>Specificity:</b>	CD64
<b>Other names:</b>	FcRI
<b>Format:</b>	StarBright Violet 790
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	10.1
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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 [www.bio-rad-antibodies.com/protocols](http://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 StarBright Violet 790 - liquid

#### Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
StarBright Violet 790	402	782

#### Preparation

Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant

#### Buffer Solution

Phosphate buffered saline

<b>Preservative Stabilisers</b>	0.09% Sodium Azide (NaN <sub>3</sub> ) 1% Bovine Serum Albumin 0.1% Pluronic F68 0.1% PEG 3350 0.05% Tween 20
<b>Immunogen</b>	Human monocytes
<b>External Database Links</b>	<b>UniProt:</b> <a href="#">P12314</a> <a href="#">Related reagents</a>  <b>Entrez Gene:</b> <a href="#">2209</a> FCGR1A <a href="#">Related reagents</a>
<b>Synonyms</b>	FCG1, FCGR1, IGFR1
<b>Fusion Partners</b>	Spleen cells from immunised BALB/c mice were fused with cells of the mouse SP2/0-Ag14 myeloma cell line
<b>Specificity</b>	<b>Mouse anti Human CD64 antibody, clone 10.1</b> 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.
<b>Flow Cytometry</b>	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.
<b>References</b>	<ol style="list-style-type: none"> <li>1. 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. <a href="#">J Immunol. 161: 3966-73.</a></li> <li>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. <a href="#">Blood. 91: 266-74.</a></li> <li>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? <a href="#">Rev Esp Cardiol. 56: 465-72.</a></li> <li>4. Beekman, J.M. <i>et al.</i> (2004) Direct interaction between FcγRI (CD64) and periplakin controls receptor endocytosis and ligand binding capacity. <a href="#">Proc Natl Acad Sci U S A. 101: 10392-7.</a></li> <li>5. Kahn, F. <i>et al.</i> (2008) Antibodies against a surface protein of <i>Streptococcus pyogenes</i> promote a pathological inflammatory response. <a href="#">PLoS Pathog. 4 (9): e1000149.</a></li> <li>6. 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. <a href="#">Immunology. 125: 503-9.</a></li> <li>7. Eisenhardt, S.U. <i>et al.</i> (2009) Dissociation of pentameric to monomeric C-reactive</li> </ol>

protein on activated platelets localizes inflammation to atherosclerotic plaques. [Circ Res. 105: 128-37.](#)

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10. Fet, N.G. *et al.* (2012) Reduction of activated macrophages after ischaemia-reperfusion injury diminishes oxidative stress and ameliorates renal damage. [Nephrol Dial Transplant. 27 \(8\): 3149-55.](#)

11. Kapelski S *et al.* (2014) Assessment of the neutrophilic antibody-dependent respiratory burst (ADRB) response to *Plasmodium falciparum*. [J Leukoc Biol. 96 \(6\): 1131-42.](#)

12. Hristodorov, D. *et al.* (2016) Fully human MAP-fusion protein selectively targets and eliminates proliferating CD64(+) M1 macrophages. [Immunol Cell Biol. 94 \(5\): 470-8.](#)

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. [Cell Rep. 30 \(13\): 4386-98.e5.](#)

15. Tonecka, K. *et al.* (2021) The CD200 Regulates Inflammation in Mice Independently of TNF-α Production. [Int J Mol Sci. 22 \(10\): 5358.](#)

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**Storage**

Store at +4°C. DO NOT FREEZE.  
This product should be stored undiluted.

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**Guarantee**

12 months from date of despatch

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**Acknowledgements**

This product is covered by U.S. Patent No. 10,150,841 and related U.S. and foreign counterparts

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**Health And Safety Information**

Material Safety Datasheet documentation #20471 available at:  
<https://www.bio-rad-antibodies.com/SDS/MCA756SBV790>  
20471

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**Regulatory**

For research purposes only

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## Related Products

### Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

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'M429795:240429'

Printed on 23 Jan 2025

