

## Datasheet: MCA551SBV610

<b>Description:</b>	MOUSE ANTI HUMAN CD11b:StarBright Violet 610
<b>Specificity:</b>	CD11b
<b>Other names:</b>	CD11, INTEGRIN ALPHA M CHAIN, MAC-1
<b>Format:</b>	StarBright Violet 610
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	ICRF44
<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: Cynomolgus monkey, Baboon, Rhesus Monkey  
Does not react with: Cat

**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 610 - liquid

#### Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
StarBright Violet 610	403	607

#### Preparation

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

<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative</b>	0.09% Sodium Azide (NaN <sub>3</sub> )
<b>Stabilisers</b>	1% Bovine Serum Albumin 0.1% Pluronic F68 0.1% PEG 3350 0.05% Tween 20
<b>Approx. Protein Concentrations</b>	For information on the concentration of our StarBright Dye conjugated reagents please visit our <a href="#">FAQ</a> page.
<b>Immunogen</b>	Rheumatoid synovial cells and human monocytes.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P11215</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">3684</a>    ITGAM    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	CD11B, CR3A
<b>RRID</b>	AB_2943373
<b>Fusion Partners</b>	Spleen cells from immunized BALB/c mice were fused with cells of the mouse Sp2/0 myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Human CD11b antibody, clone ICRF44</b> recognizes the human CD11b cell surface glycoprotein, a 165 kDa molecule also known as the alphaM integrin, MAC-1 and CR3. This molecule is expressed as a heterodimer in association with the beta 2 integrin, and is found upon monocytes, granulocytes, NK cells and some peripheral blood lymphocytes.</p> <p>Mouse anti Human CD11b antibody, clone ICRF44 has been reported to have various functional effects on monocytes, blocking adhesion and stimulating cytokine and chemokine release.</p>
<b>Flow Cytometry</b>	Use 5µl of the suggested working dilution to label 0.5x10 <sup>6</sup> cells in 100µl. Best practices suggest a 5 min centrifugation at 6,000g prior to sample application.
<b>References</b>	<ol style="list-style-type: none"> <li>1. Malhotra, V. <i>et al.</i> (1986) Ligand binding by the p150,95 antigen of U937 monocytic cells: properties in common with complement receptor type 3 (CR3). <a href="#">Eur J Immunol. 16 (9): 1117-23.</a></li> <li>2. Jonker, M. <i>et al.</i> (1989) Reactivity of mAb specific for human CD markers with Rhesus monkey leucocyte. Leucocyte Typing IV. Oxford University Press 1058-1063.</li> <li>3. Dransfield, I. <i>et al.</i> (1992) Interaction of leukocyte integrins with ligand is necessary but not sufficient for function. <a href="#">J Cell Biol. 116 (6): 1527-35.</a></li> <li>4. Rezzonico, R. <i>et al.</i> (2000) Engagement of CD11b and CD11c beta2 integrin by</li> </ol>

- antibodies or soluble CD23 induces IL-1beta production on primary human monocytes through mitogen-activated protein kinase-dependent pathways. [Blood. 95 \(12\): 3868-77.](#)
5. Stirling, R.G. *et al.* (2001) Interleukin-5 induces CD34(+) eosinophil progenitor mobilization and eosinophil CCR3 expression in asthma. [Am J Respir Crit Care Med. 164: 1403-9.](#)
6. Canalli, A.A. *et al.* (2001) Participation of Mac-1, LFA-1 and VLA-4 integrins in the in vitro adhesion of sickle cell disease neutrophils to endothelial layers, and reversal of adhesion by simvastatin. [Haematologica 96: 526-33.](#)
7. Rezzonico, R. *et al.* (2001) Ligation of CD11b and CD11c beta(2) integrins by antibodies or soluble CD23 induces macrophage inflammatory protein 1alpha (MIP-1alpha) and MIP-1beta production in primary human monocytes through a pathway dependent on nuclear factor-kappaB. [Blood. 97 \(10\): 2932-40.](#)
8. Woollard, K.J. *et al.* (2002) Direct modulatory effect of C-reactive protein on primary human monocyte adhesion to human endothelial cells. [Clin Exp Immunol. 130: 256-62.](#)
9. Glasow, A. *et al.* (2005) Retinoids and myelomonocytic growth factors co-operatively activate RAR{alpha} and induce human myeloid leukemia cell differentiation via MAP kinase pathways. [Blood 105: 341-9.](#)
10. Urquhart, P. *et al.* (2007) Carbon monoxide-releasing molecules modulate leukocyte-endothelial interactions under flow. [J Pharmacol Exp Ther. 321: 656-62.](#)
11. Patel, S. *et al.* (2009) Reconstituted high-density lipoprotein increases plasma high-density lipoprotein anti-inflammatory properties and cholesterol efflux capacity in patients with type 2 diabetes. [J Am Coll Cardiol. 53: 962-71.](#)
12. Ramacciotti, E. *et al.* (2011) Evaluation of soluble p-selectin as a marker for the diagnosis of deep venous thrombosis. [Clin Appl Thromb Hemost. 17: 425-31.](#)
13. Paul, G. *et al.* (2012) The adult human brain harbors multipotent perivascular mesenchymal stem cells. [PLoS One 7: e35577.](#)
14. Gomes-Alves, P. *et al.* (2016) In vitro expansion of human cardiac progenitor cells: exploring 'omics tools for characterization of cell-based allogeneic products. [Transl Res. 171: 96-110.e1-3.](#)
15. Chen, Y.C. *et al.* (2018) Effects of normoxic and hypoxic exercise training on the bactericidal capacity and subsequent apoptosis of neutrophils in sedentary men. [Eur J Appl Physiol. 118 \(9\): 1985-1995.](#)
16. Nie, R. *et al.* (2019) *Porphyromonas gingivalis* Infection Induces Amyloid-β Accumulation in Monocytes/Macrophages. [J Alzheimers Dis. 72 \(2\): 479-94.](#)
17. Hughes, S.F. *et al.* (2020) The role of phagocytic leukocytes following flexible ureteroscopy, for the treatment of kidney stones: an observational, clinical pilots-study. [Eur J Med Res. 25 \(1\): 68.](#)

<b>Storage</b>	This product is shipped at ambient temperature. Store at +4°C. DO NOT FREEZE. This product should be stored undiluted.
<b>Guarantee</b>	12 months from date of despatch
<b>Acknowledgements</b>	This product is covered by U.S. Patent No. 10,150,841 and related U.S. and foreign counterparts
<b>Health And Safety</b>	Material Safety Datasheet documentation #20471 available at:

**Information** <https://www.bio-rad-antibodies.com/SDS/MCA551SBV610>

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**Regulatory** For research purposes only

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## Related Products

### Recommended Useful Reagents

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

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

**Product inquiries:** [www.bio-rad-antibodies.com/technical-support](http://www.bio-rad-antibodies.com/technical-support)

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