

## Datasheet: MCA551PE

**BATCH NUMBER 151677**

<b>Description:</b>	MOUSE ANTI HUMAN CD11b:RPE
<b>Specificity:</b>	CD11b
<b>Other names:</b>	INTEGRIN ALPHA M CHAIN, MAC-1
<b>Format:</b>	RPE
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	ICRF44
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	100 TESTS

## 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 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

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 R. Phycoerythrin (RPE) - lyophilized

### Reconstitution

Reconstitute with 1 ml distilled water

### Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
RPE 488nm laser	496	578

<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative</b>	0.09% Sodium Azide
<b>Stabilisers</b>	1% Bovine Serum Albumin 5% Sucrose
<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_321291
<b>Fusion Partners</b>	Spleen cells from immunised 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 10ul of the suggested working dilution to label 100ul of whole blood or 10 <sup>6</sup> cells in 100ul.
<b>References</b>	<ol style="list-style-type: none"> <li>1. Yoshino, M. <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. <a href="#">Exp Anim. 49: 97-110.</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. 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> </ol>

5. 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.](#)
6. 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.](#)
7. Rezzonico, R. *et al.* (2000) Engagement of CD11b and CD11c beta2 integrin by antibodies or soluble CD23 induces IL-1beta production on primary human monocytes through mitogen-activated protein kinase-dependent pathways. [Blood. 95 \(12\): 3868-77.](#)
8. 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.](#)
9. 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.](#)
10. 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.](#)
11. Urquhart, P. *et al.* (2007) Carbon monoxide-releasing molecules modulate leukocyte-endothelial interactions under flow. [J Pharmacol Exp Ther. 321: 656-62.](#)
12. 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.](#)
13. 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.](#)
14. Paul, G. *et al.* (2012) The adult human brain harbors multipotent perivascular mesenchymal stem cells. [PLoS One 7: e35577.](#)
15. Gomes-Alves, P. *et al.* (2016) *In vitro* expansion of human cardiac progenitor cells: Exploring 'omics tools for characterization of cell-based allogeneic products [Translational Research. 9 Feb \[Epub ahead of print\]](#)
16. 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.](#)

---

**Storage**

Prior to reconstitution store at +4°C. Following reconstitution store at +4°C.

DO NOT FREEZE.

This product should be stored undiluted. This product is photosensitive and should be protected from light. 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 #20487 available at: <https://www.bio-rad-antibodies.com/SDS/MCA551PE>  
20487

---

## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA928PE\)](#)

### Recommended Useful Reagents

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

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

**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto:antibody_sales_us@bio-rad.com)

**Worldwide**

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: [antibody\\_sales\\_uk@bio-rad.com](mailto:antibody_sales_uk@bio-rad.com)

**Europe**

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: [antibody\\_sales\\_de@bio-rad.com](mailto:antibody_sales_de@bio-rad.com)

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

'M375587:210104'

**Printed on 18 Mar 2025**

---