

## Datasheet: MCA551FT

|                      |                               |
|----------------------|-------------------------------|
| <b>Description:</b>  | MOUSE ANTI HUMAN CD11b:FITC   |
| <b>Specificity:</b>  | CD11b                         |
| <b>Other names:</b>  | INTEGRIN ALPHA M CHAIN, MAC-1 |
| <b>Format:</b>       | FITC                          |
| <b>Product Type:</b> | Monoclonal Antibody           |
| <b>Clone:</b>        | ICRF44                        |
| <b>Isotype:</b>      | IgG1                          |
| <b>Quantity:</b>     | 25 µg                         |

## 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 - 1/10        |

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.

|                                       |                                                                                                                                                                       |                            |                          |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|--------------------------|
| <b>Target Species</b>                 | Human                                                                                                                                                                 |                            |                          |
| <b>Species Cross Reactivity</b>       | Reacts with: Cynomolgus monkey, Baboon, Rhesus Monkey<br>Does not react with: Cat<br><b>N.B.</b> Antibody reactivity and working conditions may vary between species. |                            |                          |
| <b>Product Form</b>                   | Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid                                                                                        |                            |                          |
| <b>Max Ex/Em</b>                      | <b>Fluorophore</b>                                                                                                                                                    | <b>Excitation Max (nm)</b> | <b>Emission Max (nm)</b> |
|                                       | FITC                                                                                                                                                                  | 490                        | 525                      |
| <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 Stabilisers</b>       | 0.09% Sodium Azide                                                                                                                                                    |                            |                          |
|                                       | 1% Bovine Serum Albumin                                                                                                                                               |                            |                          |
| <b>Approx. Protein Concentrations</b> | IgG concentration 0.1 mg/ml                                                                                                                                           |                            |                          |
| <b>Immunogen</b>                      | Rheumatoid synovial cells and human monocytes                                                                                                                         |                            |                          |

**External Database  
Links**

**UniProt:**

[P11215](#)   [Related reagents](#)

**Entrez Gene:**

[3684](#)   ITGAM   [Related reagents](#)

**Synonyms**

CD11B, CR3A

**Fusion Partners**

Spleen cells from immunised BALB/c mice were fused with cells of the mouse Sp2/0 myeloma cell line

**Specificity**

**Mouse anti Human CD11b antibody, clone ICRF44** 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.

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.

**Flow Cytometry**

Use 10ul of the suggested working dilution to label 10<sup>6</sup> cells or 100ul whole blood

**References**

1. Yoshino, M. *et al.* (2000) Upgrading of flow cytometric analysis for absolute counts, cytokines and other antigenic molecules of cynomolgus monkeys (*Macaca fascicularis*) by using anti-human cross-reactive antibodies. [Exp Anim. 49: 97-110.](#)
2. Jonker, M. *et al.* (1989) Reactivity of mAb specific for human CD markers with Rhesus monkey leucocyte. *Leucocyte Typing IV*. Oxford University Press 1058-1063.
3. Dransfield, I. *et al.* (1992) Interaction of leukocyte integrins with ligand is necessary but not sufficient for function. [J Cell Biol. 116 \(6\): 1527-35.](#)
4. Malhotra, V. *et al.* (1986) Ligand binding by the p150,95 antigen of U937 monocytic cells: properties in common with complement receptor type 3 (CR3). [Eur J Immunol. 16 \(9\): 1117-23.](#)
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.](#)

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|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Storage</b>                       | Store at +4°C or at -20°C if preferred.<br><br>This product should be stored undiluted.<br><br>Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.<br><br>Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use. |
| <b>Shelf Life</b>                    | 18 months from date of despatch.                                                                                                                                                                                                                                                                                                                                                          |
| <b>Health And Safety Information</b> | Material Safety Datasheet documentation #10041 available at:<br>10041: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf</a>                                                                                                                                                                                  |
| <b>Regulatory</b>                    | For research purposes only                                                                                                                                                                                                                                                                                                                                                                |

## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:FITC \(MCA928F\)](#)

### Recommended Useful Reagents

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

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

|                                  |                                                                                                                                         |                  |                                                                                                                                                 |               |                                                                                                                                                     |
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