

Datasheet: MCA551A647

BATCH NUMBER 171867

Description:	MOUSE ANTI HUMAN CD11b:Alexa Fluor® 647
Specificity:	CD11b
Other names:	CD11, INTEGRIN ALPHA M CHAIN, MAC-1
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	ICRF44
Isotype:	IgG1
Quantity:	100 TESTS/1ml

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: 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 Alexa Fluor® 647 - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
Alexa Fluor®647	650	665

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 1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.05 mg/ml
Immunogen	Rheumatoid synovial cells and human monocytes.
External Database Links	<p>UniProt: P11215 Related reagents</p> <p>Entrez Gene: 3684 ITGAM Related reagents</p>
Synonyms	CD11B, CR3A
RRID	AB_324800
Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells of the mouse Sp2/0 myeloma cell line.
Specificity	<p>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.</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>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells or 100ul whole blood
References	<ol style="list-style-type: none"> 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). Eur J Immunol. 16 (9): 1117-23. 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. 3. Dransfield, I. <i>et al.</i> (1992) Interaction of leukocyte integrins with ligand is necessary but not sufficient for function. J Cell Biol. 116 (6): 1527-35. 4. Rezzonico, R. <i>et al.</i> (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. 5. Stirling, R.G. <i>et al.</i> (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.](#)

Storage

This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.

Guarantee

12 months from date of despatch

Acknowledgements

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Health And Safety Information Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA551A647>

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA928A647\)](#)

Recommended Useful Reagents

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

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

Product inquiries: www.bio-rad-antibodies.com/technical-support

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