

Datasheet: MCA551

BATCH NUMBER 159385

Description:	MOUSE ANTI HUMAN CD11b
Specificity:	CD11b
Other names:	INTEGRIN ALPHA M CHAIN, MAC-1
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	ICRF44
Isotype:	IgG1
Quantity:	0.2 mg

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	▪			1/10 - 1/100
Immunohistology - Frozen (1)	▪			1/100 - 1/1000
Immunohistology - Paraffin		▪		
ELISA			▪	
Immunoprecipitation	▪			
Western Blotting			▪	

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.

(1)The epitope recognised by this antibody is reported to be sensitive to formaldehyde fixation and tissue processing. Bio-Rad recommends the use of acetone fixation for frozen sections.

Target Species	Human
Species Cross Reactivity	<p>Reacts with: Cynomolgus monkey, Baboon, Rhesus Monkey</p> <p>Does not react with: Cat</p> <p>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</p>

further information.

Product Form	Purified IgG - liquid
---------------------	-----------------------

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
---------------------------------	--------------------

Carrier Free	Yes
---------------------	-----

Approx. Protein Concentrations	IgG concentration 1 mg/ml
---------------------------------------	---------------------------

Immunogen	Rheumatoid synovial cells and human monocytes.
------------------	--

External Database Links	UniProt: P11215 Related reagents Entrez Gene: 3684 ITGAM Related reagents
--------------------------------	--

Synonyms	CD11B, CR3A
-----------------	-------------

RRID	AB_321288
-------------	-----------

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
-----------------------	--

Histology Positive Control Tissue	Human tonsil
--	--------------

References	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. *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. 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.](#)
 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 ureterorenoscopy, 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.

Guarantee	12 months from date of despatch
------------------	---------------------------------

Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA551 10040
--------------------------------------	--

Regulatory	For research purposes only
-------------------	----------------------------

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight@488 , DyLight@550 , DyLight@650 , DyLight@680 , DyLight@800 , FITC , HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: 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	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: 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://www.bio-rad-antibodies.com/datasheets)
'M388018:210804'

Printed on 09 Feb 2024