

Datasheet: MCA551 **BATCH NUMBER 1601**

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.biorad-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	Reacts with: Cynom		
Reactivity	Does not react with		

molgus monkey, Baboon, Rhesus Monkey

h: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

Product Form Purified IgG - liquid Preparation Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant **Buffer Solution** Phosphate buffered saline **Preservative** 0.09% Sodium Azide **Stabilisers Carrier Free** Yes Approx. Protein IgG concentration 1 mg/ml Concentrations **Immunogen** Rheumatoid synovial cells and human monocytes **External Database UniProt:** Links Related reagents P11215 **Entrez Gene:** Related reagents 3684 ITGAM **Synonyms** CD11B, CR3A **RRID** AB 321288 **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 10⁶ cells or 100ul whole blood **Histology Positive** Human tonsil **Control Tissue** References 1. Yoshino, M. et al. (2000) Upgrading of flow cytometric analysis for absolute counts,

further information.

- 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. <u>J Cell Biol. 116 (6): 1527-35.</u>
- 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). <u>Eur J Immunol. 16</u> (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. <u>Blood 105: 341-9.</u>
- 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. <u>Blood. 95 (12): 3868-77.</u>
- 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. <u>Haematologica 96: 526-33.</u>
- 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. <u>J Am Coll Cardiol. 53: 962-71.</u>
- 10. Stirling, R.G. *et al.* (2001) Interleukin-5 induces CD34(+) eosinophil progenitor mobilization and eosinophil CCR3 expression in asthma. <u>Am J Respir Crit Care Med. 164: 1403-9.</u>
- 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. <u>Clin Appl Thromb Hemost.</u> 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 <u>Translational Research</u>. 9 Feb [Epub ahead of print]
- 16. Hughes, S.F. *et al.* (2020) The role of phagocytic leukocytes following flexible ureterenoscopy, for the treatment of kidney stones: an observational, clinical pilots-study. <u>Eur J Med Res. 25 (1): 68.</u>

Storage

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. 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 #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...)

Goat Anti Mouse IgG IgA IgM (STAR87...)

RPE

Goat Anti Mouse IgG (STAR76...)

RPE

Goat Anti Mouse IgG (STAR70...)

FITC

Goat Anti Mouse IgG (H/L) (STAR117...) Alk. Phos., DyLight®488, DyLight®550,

Worldwide

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

Rabbit Anti Mouse IgG (STAR13...) HRP

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL (MCA928)

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

-ax: +1 919 878 3751

 ${\bf Email: antibody_sales_us@bio-rad.com}$

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 'M368215:200529'

Printed on 09 Feb 2024

© 2024 Bio-Rad Laboratories Inc | Legal | Imprint