Datasheet: MCA551SBV570

Description:	MOUSE ANTI HUMAN CD11b:StarBright Violet 570
Specificity:	CD11b
Other names:	CD11, INTEGRIN ALPHA M CHAIN, MAC-1
Format:	StarBright Violet 570
Product Type:	Monoclonal Antibody
Clone:	ICRF44
Isotype:	IgG1
Quantity:	100 TESTS/0.5ml

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 StarBright Violet 570 - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
StarBright Violet 570	404	571

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 (NaN_3) 1% Bovine Serum Albumin 0.1% Pluronic F68 0.1% PEG 3350 0.05% Tween 20
Approx. Protein Concentrations	For information on the concentration of our StarBright Dye conjugated reagents please visit our FAQ page.
Immunogen	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 immunized 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 5µl of the suggested working dilution to label $0.5x10^6$ cells in 100µl. Best practices suggest a 5 min centrifugation at 6,000g prior to sample application.
References	1. 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. 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 ureterenoscopy, 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. Store at +4°C. DO NOT FREEZE. This product should be stored undiluted.
Guarantee	12 months from date of despatch
Acknowledgements	This product is covered by U.S. Patent No. 10,150,841 and related U.S. and foreign counterparts
Health And Safety Information	Material Safety Datasheet documentation #20471 available at: https://www.bio-rad-antibodies.com/SDS/MCA551SBV570

Regulatory	For research purposes only

Related Products

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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Printed on 01 Jun 2026