Datasheet: MCA2087F

BATCH NUMBER 161304

Description:	MOUSE ANTI HUMAN CD11c:FITC
Specificity:	CD11c
Other names:	INTEGRIN ALPHA X CHAIN
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	BU15
Isotype:	IgG1
Quantity:	0.1 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	▪			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.

Target Species

Human

Species Cross Reactivity

Reacts with: Cynomolgus monkey

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 Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
FITC	490	525

Preparation

Purified IgG prepared from tissue culture supernatant

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers	0.09% Sodium Azide 1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml
External Database Links	**UniProt:** P20702 Related reagents **Entrez Gene:** 3687 ITGAX Related reagents
Synonyms	CD11C
RRID	AB_323673
Specificity	**Mouse anti Human CD11c antibody, clone Bu15** recognizes the integrin alpha^{x} subunit (ITGAX), a ~150 kDa glycoprotein also known as CD11 antigen-like family member C or Leu M5, CD11c is expressed by macrophages, monocytes, NK cells and most dendritic cells (Kohrgruber *et al.* 1999). CD11c is also expressed at a lower level by granulocytes. CD11c forms a heterodimeric integral membrane protein with the integrin beta 2 chain to form the leukocyte specific integrin 'inactivated-C3b receptor 4'. CD11c interacts with a number of ligands including the G-P-R sequence in fibrinogen, ICAM-1 (Frick *et al.* 2005), iC3b (Sadhu *et al.* 2007) and Junctional adhesion molecule-like (Bazzoni *et al.* 2011). CD11c is involved in cell-cell interactions during the inflammatory process and is important for monocyte adhesion and chemotaxis. CD11c also acts as a signalling receptor for polysaccharide (Inqualls *et al.* 1995) CD11c is expressed by hairy cell leukaemia cells (Goodman *et al.* 2003; Nicolaou *et al.* 2003).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.
References	1. Hogg, N. *et al.* (1986) The p150,95 molecule is a marker of human mononuclear phagocytes: comparison with expression of class II molecules. Eur J Immunol. 16 (3): 240-8. 2. Newman, K.C. *et al.* (2006) Cross-talk with myeloid accessory cells regulates human natural killer cell interferon-gamma responses to malaria. PLoS Pathog. 2: e118. 3. Herman, S. *et al.* (2012) Regulatory T cells form stable and long-lasting cell cluster with myeloid dendritic cells (DC). Int Immunol. 24 (7): 417-26. 4. Silk, K.M. *et al.* (2012) Rapamycin conditioning of dendritic cells differentiated from human ES cells promotes a tolerogenic phenotype. J Biomed Biotechnol. 2012:172420. 5. Xie, Z. *et al.* (2016) Human umbilical cord-derived mesenchymal stem cells elicit macrophages into an anti-inflammatory phenotype to alleviate insulin resistance in type 2 diabetic rats. Stem Cells. 34 (3): 627-39. 6. Brown, D.P. *et al.* (2009) The inhibitory receptor LILRB4 (ILT3) modulates antigen

presenting cell phenotype and, along with LILRB2 (ILT4), is upregulated in response to *Salmonella* infection. BMC Immunol. 10: 56.
7. Schroeder JH *et al.* (2017) *Brugia malayi* microfilariae adhere to human vascular endothelial cells in a C3-dependent manner. PLoS Negl Trop Dis. 11 (5): e0005592.
8. Simões, R.D. *et al.* (2019) Effects of Regulatory T Cell Depletion on NK Cell Responses against *Listeria monocytogenes* in Feline Immunodeficiency Virus Infected Cats. Viruses. 11 (11) Oct 24 [Epub ahead of print].
9. Levy, O. *et al.* (2003) Critical role of the complement system in group B streptococcus-induced tumor necrosis factor alpha release. Infect Immun. 71: 6344-53.

Further Reading

1. Larson, R.S. & Springer, T.A. (1990) Structure and function of leukocyte integrins. Immunol Rev. 114: 181-217.
2. Loike, J.D. *et al.* (1991) CD11c/CD18 on neutrophils recognizes a domain at the N terminus of the A alpha chain of fibrinogen. Proc Natl Acad Sci U S A. 88 (3): 1044-8.
3. Sanchez-Madrid, F. and Corbi, A.L. (1992) Leukocyte integrins: structure, function and regulation of their activity. Seminars Cell Biol. 3: 199-210.

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

Health And Safety Information

Material Safety Datasheet documentation #10041 available at:
https://www.bio-rad-antibodies.com/SDS/MCA2087F
10041

Regulatory

For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:FITC (MCA928F)

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A)
HUMAN SEROBLOCK (BUF070B)

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
'M385636:210513'

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