

Datasheet: MCA2087PE

BATCH NUMBER 1612

Description:	MOUSE ANTI HUMAN CD11c:RPE
Specificity:	CD11c
Other names:	INTEGRIN ALPHA X CHAIN
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	BU15
Isotype:	IgG1
Quantity:	100 TESTS

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 R. Phycoerythrin (RPE) - lyophilized

Reconstitution

Reconstitute with 1 ml distilled water

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
RPE 488nm laser	496	578

Preparation

Purified IgG prepared from tissue culture supernatant

Buffer Solution	Phosphate buffered saline
Preservative	0.09% Sodium Azide
Stabilisers	1% Bovine Serum Albumin 5% Sucrose
External Database Links	<p>UniProt: P20702 Related reagents</p> <p>Entrez Gene: 3687 ITGAX Related reagents</p>
Synonyms	CD11C
RRID	AB_324663
Specificity	<p>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.</p> <p>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)</p> <p>CD11c is expressed by hairy cell leukaemia cells (Goodman et al. 2003; Nicolaou et al. 2003).</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	<ol style="list-style-type: none"> Hogg, N. <i>et al.</i> (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. Newman, K.C. <i>et al.</i> (2006) Cross-talk with myeloid accessory cells regulates human natural killer cell interferon-gamma responses to malaria. PLoS Pathog. 2: e118. Herman, S. <i>et al.</i> (2012) Regulatory T cells form stable and long-lasting cell cluster with myeloid dendritic cells (DC). Int Immunol. 24 (7): 417-26. Silk, K.M. <i>et al.</i> (2012) Rapamycin conditioning of dendritic cells differentiated from human ES cells promotes a tolerogenic phenotype. J Biomed Biotechnol. 2012:172420. Xie, Z. <i>et al.</i> (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	<ol style="list-style-type: none"> 1. Larson, R.S. & Springer, T.A. (1990) Structure and function of leukocyte integrins. Immunol Rev. 114: 181-217. 2. Loike, J.D. <i>et al.</i> (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.
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Storage	<p>Prior to reconstitution store at +4°C. Following reconstitution store at +4°C.</p> <p>This product should be stored undiluted.</p> <p>DO NOT FREEZE. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
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Guarantee	12 months from date of despatch
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Health And Safety Information	<p>Material Safety Datasheet documentation #20487 available at: https://www.bio-rad-antibodies.com/SDS/MCA2087PE</p> <p>20487</p>
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Regulatory	For research purposes only
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Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA928PE\)](#)

Recommended Useful Reagents

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

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

North & South America	<p>Tel: +1 800 265 7376</p> <p>Fax: +1 919 878 3751</p> <p>Email: antibody_sales_us@bio-rad.com</p>	Worldwide	<p>Tel: +44 (0)1865 852 700</p> <p>Fax: +44 (0)1865 852 739</p> <p>Email: antibody_sales_uk@bio-rad.com</p>	Europe	<p>Tel: +49 (0) 89 8090 95 21</p> <p>Fax: +49 (0) 89 8090 95 50</p> <p>Email: antibody_sales_de@bio-rad.com</p>
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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)

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Printed on 20 Apr 2023

