

Datasheet: MCA2087A647

**BATCH NUMBER 1601**

<b>Description:</b>	MOUSE ANTI HUMAN CD11c:Alexa Fluor® 647
<b>Specificity:</b>	CD11c
<b>Other names:</b>	INTEGRIN ALPHA X CHAIN
<b>Format:</b>	ALEXA FLUOR® 647
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	BU15
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	100 TESTS/1ml

## 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](http://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 <b>N.B.</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 Alexa Fluor® 647- liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	Alexa Fluor®647	650	665
Preparation	Purified IgG prepared from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		

<b>Preservative Stabilisers</b>	0.09% Sodium Azide 1% Bovine Serum Albumin
<b>Approx. Protein Concentrations</b>	IgG concentration 0.05 mg/ml
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P20702</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">3687</a>    ITGAX    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	CD11C
<b>RRID</b>	AB_324912
<b>Specificity</b>	<p><b>Mouse anti Human CD11c antibody, clone Bu15</b> recognizes the integrin alpha<sup>x</sup> 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 (<a href="#">Kohrgruber et al. 1999</a>). 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 '<a href="#">inactivated-C3b receptor 4</a>'. CD11c interacts with a number of ligands including the <a href="#">G-P-R</a> sequence in fibrinogen, ICAM-1 (<a href="#">Frick et al. 2005</a>), iC3b (<a href="#">Sadhu et al. 2007</a>) and Junctional adhesion molecule-like (<a href="#">Bazzoni et al. 2011</a>). 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 (<a href="#">Inqualls et al. 1995</a>)</p> <p>CD11c is expressed by hairy cell leukaemia cells (<a href="#">Goodman et al. 2003</a>; <a href="#">Nicolaou et al. 2003</a>).</p>
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
<b>References</b>	<ol style="list-style-type: none"> <li>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. <a href="#">Eur J Immunol. 16 (3): 240-8.</a></li> <li>Newman, K.C. <i>et al.</i> (2006) Cross-talk with myeloid accessory cells regulates human natural killer cell interferon-gamma responses to malaria. <a href="#">PLoS Pathog. 2: e118.</a></li> <li>Herman, S. <i>et al.</i> (2012) Regulatory T cells form stable and long-lasting cell cluster with myeloid dendritic cells (DC). <a href="#">Int Immunol. 24 (7): 417-26.</a></li> <li>Silk, K.M. <i>et al.</i> (2012) Rapamycin conditioning of dendritic cells differentiated from human ES cells promotes a tolerogenic phenotype. <a href="#">J Biomed Biotechnol. 2012:172420.</a></li> <li>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. <a href="#">Stem Cells. 34 (3): 627-39.</a></li> <li>Brown, D.P. <i>et al.</i> (2009) The inhibitory receptor LILRB4 (ILT3) modulates antigen</li> </ol>

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. 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.](#)

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<b>Further Reading</b>	<p>1. Larson, R.S. &amp; Springer, T.A. (1990) Structure and function of leukocyte integrins. <a href="#">Immunol Rev. 114: 181-217.</a></p> <p>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. <a href="#">Proc Natl Acad Sci U S A. 88 (3): 1044-8.</a></p> <p>3. Sanchez-Madrid, F. and Corbi, A.L. (1992) Leukocyte integrins: structure, function and regulation of their activity. <a href="#">Seminars Cell Biol. 3: 199-210.</a></p>
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<b>Storage</b>	<p>Store at +4°C or at -20°C if preferred.</p> <p>This product should be stored undiluted.</p> <p>Storage in frost free freezers is not recommended. This product is photosensitive and should be protected from light.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>
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<b>Guarantee</b>	12 months from date of despatch
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<b>Health And Safety Information</b>	<p>Material Safety Datasheet documentation #10041 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2087A647">https://www.bio-rad-antibodies.com/SDS/MCA2087A647</a></p> <p>10041</p>
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<b>Regulatory</b>	For research purposes only
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## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA928A647\)](#)

## Recommended Useful Reagents

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

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

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