

## Datasheet: MCA2087SBV610

**BATCH NUMBER 64735406**

|                      |  |
|----------------------|--|
| <b>Description:</b>  | MOUSE ANTI HUMAN CD11c:StarBright Violet 610 |
| <b>Specificity:</b>  | CD11c  |
| <b>Other names:</b>  | CD11, INTEGRIN ALPHA X CHAIN                 |
| <b>Format:</b>       | StarBright Violet 610                        |
| <b>Product Type:</b> | Monoclonal Antibody                          |
| <b>Clone:</b>        | BU15   |
| <b>Isotype:</b>      | IgG1   |
| <b>Quantity:</b>     | 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](http://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  
**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 610 - liquid

### Max Ex/Em

| Fluorophore           | Excitation Max (nm) | Emission Max (nm) |
|-----------------------|---------------------|-------------------|
| StarBright Violet 610 | 403                 | 607               |

### Preparation

Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant

|                                       |   |
|---------------------------------------|---|
| <b>Buffer Solution</b>                | Phosphate buffered saline   |
| <b>Preservative</b>                   | 0.09% Sodium Azide (NaN <sub>3</sub> )  |
| <b>Stabilisers</b>                    | 1% Bovine Serum Albumin<br>0.1% Pluronic F68<br>0.1% PEG 3350<br>0.05% Tween 20   |
| <b>Approx. Protein Concentrations</b> | For information on the concentration of our StarBright Dye conjugated reagents please visit our <a href="#">FAQ</a> page.   |
| <b>External Database Links</b>        | <p><b>UniProt:</b><br/><a href="#">P20702</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b><br/><a href="#">3687</a>    ITGAX    <a href="#">Related reagents</a></p>  |
| <b>Synonyms</b>                       | CD11C   |
| <b>RRID</b>                           | AB_2943390  |
| <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 5µl of the suggested working dilution to label 0.5x10 <sup>6</sup> cells in 100µl. Best practices suggest a 5 min centrifugation at 6,000g prior to sample application.   |
| <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>Levy, O. <i>et al.</i> (2003) Critical role of the complement system in group B streptococcus-induced tumor necrosis factor alpha release. <a href="#">Infect Immun. 71: 6344-53.</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> </ol>  |

4. 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.](#)
5. 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.](#)
6. 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.](#)
7. 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.](#)
8. 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.](#)
9. 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 \[Epub ahead of print\].](#)
10. de Vries, R.D. *et al.* (2014) Measles vaccination of nonhuman primates provides partial protection against infection with canine distemper virus. [J Virol. 88 \(8\): 4423-33.](#)

|                                      |   |
|--------------------------------------|---|
| <b>Further Reading</b>               | <ol style="list-style-type: none"> <li>1. Larson, R.S. &amp; Springer, T.A. (1990) Structure and function of leukocyte integrins. <a href="#">Immunol Rev. 114: 181-217.</a></li> <li>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></li> <li>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></li> </ol> |
| <b>Storage</b>                       | <p>This product is shipped at ambient temperature.</p> <p>Store at +4°C. DO NOT FREEZE.</p> <p>This product should be stored undiluted.</p>   |
| <b>Guarantee</b>                     | 12 months from date of despatch   |
| <b>Acknowledgements</b>              | This product is covered by U.S. Patent No. 10,150,841 and related U.S. and foreign counterparts   |
| <b>Health And Safety Information</b> | Material Safety Datasheet documentation #20471 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2087SBV610">https://www.bio-rad-antibodies.com/SDS/MCA2087SBV610</a>  |
| <b>Regulatory</b>                    | For research purposes only  |

## Related Products

### Recommended Useful Reagents

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

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

**Product inquiries:** [www.bio-rad-antibodies.com/technical-support](http://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](http://bio-rad-antibodies.com/datasheets)

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