

Datasheet: MCA2087SBV610

| | |
|----------------------|--|
| Description: | MOUSE ANTI HUMAN CD11c:StarBright Violet 610 |
| Specificity: | CD11c |
| Other names: | CD11, INTEGRIN ALPHA X CHAIN |
| Format: | StarBright Violet 610 |
| Product Type: | Monoclonal Antibody |
| Clone: | BU15 |
| 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

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

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. |
| External Database Links | <p>UniProt: P20702 Related reagents</p> <p>Entrez Gene: 3687 ITGAX Related reagents</p> |
| Synonyms | CD11C |
| RRID | AB_2943390 |
| 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 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 | <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. Levy, O. <i>et al.</i> (2003) Critical role of the complement system in group B streptococcus-induced tumor necrosis factor alpha release. Infect Immun. 71: 6344-53. 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. Brown, D.P. <i>et al.</i> (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.](#)

| | |
|------------------------|---|
| 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. <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. |
|------------------------|---|

| | |
|----------------|--|
| 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/MCA2087SBV610 |
|--------------------------------------|--|

| | |
|-------------------|----------------------------|
| 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

'M448583:260123'

Printed on 28 May 2026

