

# Datasheet: MCA1369BT

**BATCH NUMBER 164962**

<b>Description:</b>	HAMSTER ANTI MOUSE CD11c:Biotin
<b>Specificity:</b>	CD11c
<b>Other names:</b>	INTEGRIN ALPHA X CHAIN
<b>Format:</b>	Biotin
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	N418
<b>Isotype:</b>	IgG
<b>Quantity:</b>	25 µg

## 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	▪			1/5 - 1/10

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.

<b>Target Species</b>	Mouse
<b>Product Form</b>	Purified IgG conjugated to biotin - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% sodium azide (NaN <sub>3</sub> ) 1% bovine serum albumin
<b>Approx. Protein Concentrations</b>	IgG concentration 0.1 mg/ml
<b>Immunogen</b>	Mouse spleen dendritic cells.

**External Database****Links****UniProt:**[Q9QXH4](#)[Related reagents](#)**Entrez Gene:**[16411](#)

Itgax

[Related reagents](#)**RRID**

AB\_2129773

**Fusion Partners**

Spleen cells from immunised Armenian Hamster were fused with cells of the Sp2/0 myeloma cell line.

**Specificity**

**Hamster anti Mouse CD11c antibody, clone N418** recognizes the murine homolog of human CD11c, also known as Integrin Alpha X, a 150/90 kDa member of the beta 2 integrin family. In mice, CD11c is primarily expressed by dendritic cells.

Hamster anti Mouse CD11c antibody, clone N418 has been reported to enhance antigen specific responses when used to target dendritic cells *in vivo* ([Wang et al. 2000](#)).

**Flow Cytometry**

Use 10µl of the suggested working dilution to label 10<sup>6</sup> cells in 100µl.

The Fc region of monoclonal antibodies may bind to cells expressing low affinity Fc receptors. This may be reduced by using SeroBlock FcR ([BUF041A/BUF041B](#)).

**References**

1. Crowley, M.T. *et al.* (1990) Use of the fluorescence activated cell sorter to enrich dendritic cells from mouse spleen. [J Immunol Methods. 133 \(1\): 55-66.](#)
2. Dahlen, E. *et al.* (1998) Dendritic cells and macrophages are the first and major producers of TNF-alpha in pancreatic islets in the nonobese diabetic mouse. [J Immunol. 160: 3585-93.](#)
3. Wang, H. *et al.* (2000) Rapid antibody responses by low-dose, single-step, dendritic cell-targeted immunization. [Proc Natl Acad Sci U S A. 97 \(2\): 847-52.](#)
4. Lundqvist, J. *et al.* (2010) Concomitant infection decreases the malaria burden but escalates relapsing fever borreliosis. [Infect Immun. 78 \(5\): 1924-30.](#)
5. Beyer, M. *et al.* (2005) The beta2 integrin CD11c distinguishes a subset of cytotoxic pulmonary T cells with potent antiviral effects in vitro and in vivo. [Respir Res. 6: 70.](#)
6. Goupil, M. *et al.* (2009) Macrophage-mediated responses to *Candida albicans* in mice expressing the human immunodeficiency virus type 1 transgene. [Infect Immun. 77: 4136-49.](#)
7. Linehan, S.A.. (2005) The mannose receptor is expressed by subsets of APC in non-lymphoid organs. [BMC Immunol. 6:4.](#)
8. Bjorck, P. (2004) Dendritic cells exposed to herpes simplex virus *in vivo* do not produce IFN-alpha after rechallenge with virus *in vitro* and exhibit decreased T cell alloreactivity. [J Immunol. 172: 5396-404.](#)
9. Mercier, S. *et al.* (2002) Distinct roles of adenovirus vector-transduced dendritic cells, myoblasts, and endothelial cells in mediating an immune response against a transgene product. [J Virol. 76: 2899-911.](#)
10. de Jersey, J. *et al.* (2002) Activation of CD8 T cells by antigen expressed in the pituitary gland. [J Immunol. 169: 6753-9.](#)
11. Dimier-Poisson, I. *et al.* (2003) Protective mucosal Th2 immune response against

- Toxoplasma gondii by murine mesenteric lymph node dendritic cells. [Infect Immun. 71: 5254-65.](#)
12. Gonzalez-Juarrero, M. and Orme, I.M. (2001) Characterization of murine lung dendritic cells infected with *Mycobacterium tuberculosis*. [Infect Immun. 69: 1127-33.](#)
  13. Hamada, H. *et al.* (2002) Identification of multiple isolated lymphoid follicles on the antimesenteric wall of the mouse small intestine. [J Immunol. 168: 57-64.](#)
  14. Meng, Q. *et al.* (2007) Phenotypes, distribution, and morphological features of antigen-presenting cells in the murine cornea following intravitreal injection. [Mol Vis. 13: 475-86.](#)
  15. Moos, M.P. *et al.* (2005) The lamina adventitia is the major site of immune cell accumulation in standard chow-fed apolipoprotein E-deficient mice [Arterioscler Thromb Vasc Biol. 25: 2386-91.](#)
  16. Nunez, R. *et al.* (1999) Immortalized cell lines derived from mice lacking both type I and type II IFN receptors unify some functions of immature and mature dendritic cells. [Immunol Cell Biol. 77: 153-63.](#)
  17. Ponce, L.V. *et al.* (2005) Adoptive transfer of dendritic cells modulates immunogenesis and tolerogenesis in a neonatal model of murine cutaneous leishmaniasis. [Kinetoplastid Biol Dis. 4: 2.](#)
  18. Zhang, L. *et al.* (2011) The inflammatory changes of adipose tissue in late pregnant mice. [J Mol Endocrinol. 47 \(2\): 157-65.](#)
  19. Donaldson, D.S. *et al.* (2012) M cell-depletion blocks oral prion disease pathogenesis. [Mucosal Immunol. 5: 216-25.](#)
  20. Wada, T. *et al.* (2013) Eplerenone ameliorates the phenotypes of metabolic syndrome with NASH in liver-specific SREBP-1c Tg mice fed high-fat and high-fructose diet. [Am J Physiol Endocrinol Metab. 305 \(11\): E1415-25.](#)
  21. Kan, M.J. *et al.* (2015) Arginine deprivation and immune suppression in a mouse model of Alzheimer's disease. [J Neurosci. 35 \(15\): 5969-82.](#)
  22. Kayser, B.D. *et al.* (2015) Perinatal Overnutrition Exacerbates Adipose Tissue Inflammation Caused by High-Fat Feeding in C57BL/6J Mice. [PLoS One. 10 \(3\): e0121954.](#)
  23. Sehgal, A. *et al.* (2017) c-Rel is dispensable for the differentiation and functional maturation of M cells in the follicle-associated epithelium. [Immunobiology. 222 \(2\): 316-26.](#)
  24. Bender, L.H. *et al.* (2020) Intratumoral Administration of a Novel Cytotoxic Formulation with Strong Tissue Dispersive Properties Regresses Tumor Growth and Elicits Systemic Adaptive Immunity in *In Vivo* Models. [Int J Mol Sci. 21 \(12\) Jun 24 \[Epub ahead of print\].](#)
  25. Iida, Y. *et al.* (2020) Local injection of CCL19-expressing mesenchymal stem cells augments the therapeutic efficacy of anti-PD-L1 antibody by promoting infiltration of immune cells. [J Immunother Cancer. 8 \(2\) \[Epub ahead of print\].](#)
  26. Kouwenberg, M. *et al.* (2021) Reduced CXCL1 production by endogenous IL-37 expressing dendritic cells does not affect T cell activation. [PLoS One. 16 \(5\): e0251809.](#)
  27. Curina, G. *et al.* (2018) Evaluation of immune responses in mice and sheep inoculated with a live attenuated *Brucella melitensis* REV1 vaccine produced in bioreactor. [Vet Immunol Immunopathol. 198: 44-53.](#)
  28. Mohanta, S.K. *et al.* (2022) Neuroimmune cardiovascular interfaces control atherosclerosis. [Nature. 605 \(7908\): 152-159.](#)
  29. Mihindikulasooriya, P.S. *et al.* (2022) Polyphenol-rich *Sargassum horneri* alleviates atopic dermatitis-like skin lesions in NC/Nga mice by suppressing Th2-mediated cytokine IL-13 [Algae. 37 \(4\): 331-347.](#)

**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.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA1369BT>  
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**Regulatory** For research purposes only

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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)  
'M409410:221019'

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