

Datasheet: MCA1369FB

Description:	HAMSTER ANTI MOUSE CD11c:FITC
Specificity:	CD11c
Other names:	INTEGRIN ALPHA X CHAIN
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	N418
Isotype:	IgG
Quantity:	0.5 mg

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	▪			1/200 - 1/500

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	Mouse						
Product Form	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid						
Max Ex/Em	<table border="1"> <thead> <tr> <th>Fluorophore</th> <th>Excitation (nm)</th> <th>Emission (nm)</th> </tr> </thead> <tbody> <tr> <td>FITC</td> <td>490</td> <td>520</td> </tr> </tbody> </table>	Fluorophore	Excitation (nm)	Emission (nm)	FITC	490	520
Fluorophore	Excitation (nm)	Emission (nm)					
FITC	490	520					
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant						
Buffer Solution	Phosphate buffered saline						
Preservative	0.09% Sodium Azide						
Stabilisers	1% Bovine Serum Albumin						
Approx. Protein Concentrations	IgG concentration 0.5 mg/ml						
Immunogen	Mouse spleen dendritic cells.						
External Database Links	UniProt: Q9QXH4 Related reagents						

Entrez Gene:

[16411](#) Itgax [Related reagents](#)

Fusion Partners	Spleen cells from immunised Armenian Hamster were fused with cells of the Sp2/0 myeloma cell line.
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Specificity	<p>Hamster anti Mouse CD11c antibody, clone N418 recognizes the murine homolog of human CD11c, a 150/90 kDa member of the beta 2 integrin family. In mice, CD11c is primarily expressed by dendritic cells.</p> <p>Hamster anti Mouse CD11c antibody, clone N418 has been reported to enhance antigen specific responses when used to target dendritic cells <i>in vivo</i> (Wang et al. 2000).</p>
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Flow Cytometry	<p>Use 10ul of the suggested working dilution to label 10⁶ cells in 100ul.</p> <p>The Fc region of monoclonal antibodies may bind non-specifically to cells expressing low affinity Fc receptors. This may be reduced by using SeroBlock FcR (BUF041A/B).</p>
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References	<ol style="list-style-type: none">1. Crowley, M.T. <i>et al.</i> (1990) Use of the fluorescence activated cell sorter to enrich dendritic cells from mouse spleen. J Immunol Methods. 133 (1): 55-66.2. Metlay, J.P. <i>et al.</i> (1990) The distinct leukocyte integrins of mouse spleen dendritic cells as identified with new hamster monoclonal antibodies. J Exp Med. 171 (5): 1753-71.3. Wang, H. <i>et al.</i> (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. <i>et al.</i> (2010) Concomitant infection decreases the malaria burden but escalates relapsing fever borreliosis. Infect Immun. 78 (5): 1924-30.5. Beyer, M. <i>et al.</i> (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. <i>et al.</i> (2009) Macrophage-mediated responses to <i>Candida albicans</i> 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 <i>in vivo</i> do not produce IFN-alpha after rechallenge with virus <i>in vitro</i> and exhibit decreased T cell alloreactivity. J Immunol. 172: 5396-404.9. Dahlen, E. <i>et al.</i> (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: 3585-93.10. de Jersey, J. <i>et al.</i> (2002) Activation of CD8 T cells by antigen expressed in the pituitary gland. J Immunol. 169: 6753-9.11. Dimier-Poisson, I. <i>et al.</i> (2003) Protective mucosal Th2 immune response against <i>Toxoplasma gondii</i> 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 <i>Mycobacterium tuberculosis</i>. Infect Immun. 69: 1127-33.13. Hamada, H. <i>et al.</i> (2002) Identification of multiple isolated lymphoid follicles on the antimesenteric wall of the mouse small intestine. J Immunol. 168: 57-64.14. Meng, Q. <i>et al.</i> (2007) Phenotypes, distribution, and morphological features of antigen-presenting cells in the murine cornea following intravitreal injection. Mol Vis. 13: 475-86.15. Mercier, S. <i>et al.</i> (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: 2899-911.16. Moos, M.P. <i>et al.</i> (2005) The lamina adventitia is the major site of immune cell accumulation
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- in standard chow-fed apolipoprotein E-deficient mice [Arterioscler Thromb Vasc Biol. 25: 2386-91.](#)
17. 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.](#)
18. 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.](#)
19. Zhang, L. *et al.* (2011) The inflammatory changes of adipose tissue in late pregnant mice. [J Mol Endocrinol. 47 \(2\): 157-65.](#)
20. Donaldson, D.S. *et al.* (2012) M cell-depletion blocks oral prion disease pathogenesis. [Mucosal Immunol. 5: 216-25.](#)
21. 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.](#)
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. 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.](#)
24. Sehgal, A. *et al.* (2016) c-Rel is dispensable for the differentiation and functional maturation of M cells in the follicle-associated epithelium. [Immunobiology. pii: S0171-2985\(16\)30369-2. \[Epub ahead of print\]](#)

Storage

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.

Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life

18 months from date of despatch.

Health And Safety Information

Material Safety Datasheet Documentation #10041 available at: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

Regulatory

For research purposes only

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