

## Datasheet: MCA1369A488T

<b>Description:</b>	HAMSTER ANTI MOUSE CD11c:Alexa Fluor® 488
<b>Specificity:</b>	CD11c
<b>Other names:</b>	INTEGRIN ALPHA X CHAIN
<b>Format:</b>	ALEXA FLUOR® 488
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	N418
<b>Isotype:</b>	IgG
<b>Quantity:</b>	25 TESTS/0.25ml

## 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	■			1/10 - 1/100

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.

<b>Target Species</b>	Mouse						
<b>Product Form</b>	Purified IgG conjugated to Alexa Fluor® 488 - liquid						
<b>Max Ex/Em</b>	<table border="1"> <thead> <tr> <th>Fluorophore</th> <th>Excitation Max (nm)</th> <th>Emission Max (nm)</th> </tr> </thead> <tbody> <tr> <td>Alexa Fluor®488</td> <td>495</td> <td>519</td> </tr> </tbody> </table>	Fluorophore	Excitation Max (nm)	Emission Max (nm)	Alexa Fluor®488	495	519
Fluorophore	Excitation Max (nm)	Emission Max (nm)					
Alexa Fluor®488	495	519					
<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</b>	0.09% Sodium Azide						
<b>Stabilisers</b>	1% Bovine Serum Albumin						
<b>Approx. Protein Concentrations</b>	IgG concentration 0.05 mg/ml						
<b>Immunogen</b>	Mouse spleen dendritic cells.						
<b>External Database Links</b>	<b>UniProt:</b> <a href="#">Q9QXH4</a> <a href="#">Related reagents</a>						

**Entrez Gene:**

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

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<b>Fusion Partners</b>	Spleen cells from immunised Armenian Hamster were fused with cells of the Sp2/0 myeloma cell line.
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<b>Specificity</b>	<p><b>Hamster anti Mouse CD11c antibody, clone N418</b> 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.</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> (<a href="#">Wang et al. 2000</a>).</p>
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<b>Flow Cytometry</b>	<p>Use 10ul of the suggested working dilution to label 10<sup>6</sup> 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 (<a href="#">BUF041A/B</a>).</p>
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<b>References</b>	<ol style="list-style-type: none"><li>1. Crowley, M.T. <i>et al.</i> (1990) Use of the fluorescence activated cell sorter to enrich dendritic cells from mouse spleen. <a href="#">J Immunol Methods. 133 (1): 55-66.</a></li><li>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. <a href="#">J Exp Med. 171 (5): 1753-71.</a></li><li>3. Wang, H. <i>et al.</i> (2000) Rapid antibody responses by low-dose, single-step, dendritic cell-targeted immunization. <a href="#">Proc Natl Acad Sci U S A. 97 (2): 847-52.</a></li><li>4. Lundqvist, J. <i>et al.</i> (2010) Concomitant infection decreases the malaria burden but escalates relapsing fever borreliosis. <a href="#">Infect Immun. 78 (5): 1924-30.</a></li><li>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. <a href="#">Respir Res. 6: 70.</a></li><li>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. <a href="#">Infect Immun. 77: 4136-49.</a></li><li>7. Linehan, S.A.. (2005) The mannose receptor is expressed by subsets of APC in non-lymphoid organs. <a href="#">BMC Immunol. 6:4.</a></li><li>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. <a href="#">J Immunol. 172: 5396-404.</a></li><li>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. <a href="#">J Immunol. 160: 3585-93.</a></li><li>10. de Jersey, J. <i>et al.</i> (2002) Activation of CD8 T cells by antigen expressed in the pituitary gland. <a href="#">J Immunol. 169: 6753-9.</a></li><li>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. <a href="#">Infect Immun. 71: 5254-65.</a></li><li>12. Gonzalez-Juarrero, M. and Orme, I.M. (2001) Characterization of murine lung dendritic cells infected with <i>Mycobacterium tuberculosis</i>. <a href="#">Infect Immun. 69: 1127-33.</a></li><li>13. Hamada, H. <i>et al.</i> (2002) Identification of multiple isolated lymphoid follicles on the antimesenteric wall of the mouse small intestine. <a href="#">J Immunol. 168: 57-64.</a></li><li>14. Meng, Q. <i>et al.</i> (2007) Phenotypes, distribution, and morphological features of antigen-presenting cells in the murine cornea following intravitreal injection. <a href="#">Mol Vis. 13: 475-86.</a></li><li>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. <a href="#">J Virol. 76: 2899-911.</a></li><li>16. Moos, M.P. <i>et al.</i> (2005) The lamina adventitia is the major site of immune cell accumulation in standard chow-fed apolipoprotein E-deficient mice <a href="#">Arterioscler Thromb Vasc Biol. 25: 2386-91.</a></li></ol>
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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. \[Epub ahead of print\]](#)
25. Wang, C.Y. *et al.* (2018) SMCHD1 Merges Chromosome Compartments and Assists Formation of Super-Structures on the Inactive X. [Cell. May 28 \[Epub ahead of print\].](#)

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**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.

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**Shelf Life**

18 months from date of despatch.

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**Acknowledgements**

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**Health And Safety Information**

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

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**Regulatory**

For research purposes only

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## Related Products

### Recommended Negative Controls

[HAMSTER \(ARMENIAN\) IgG NEGATIVE CONTROL:Alexa Fluor® 488 \(MCA2356A488\)](#)

## Recommended Useful Reagents

[MOUSE SEROBLOCK FcR \(BUF041A\)](#)

[MOUSE SEROBLOCK FcR \(BUF041B\)](#)

**North & South** Tel: +1 800 265 7376

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