

Datasheet: MCA1369P750

BATCH NUMBER 154298

| | |
|----------------------|---|
| Description: | HAMSTER ANTI MOUSE CD11c:RPE-Alexa Fluor® 750 |
| Specificity: | CD11c |
| Other names: | INTEGRIN ALPHA X CHAIN |
| Format: | RPE-ALEXA FLUOR® 750 |
| Product Type: | Monoclonal Antibody |
| Clone: | N418 |
| Isotype: | IgG |
| Quantity: | 100 TESTS/1ml |

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 - 1/10 |

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 R. Phycoerythrin (RPE) - Alexa Fluor® 750 - lyophilized | | | | | | | | | |
| Reconstitution | Reconstitute with 1.0 ml distilled water | | | | | | | | | |
| Max Ex/Em | <table border="1"> <thead> <tr> <th>Fluorophore</th> <th>Excitation Max (nm)</th> <th>Emission Max (nm)</th> </tr> </thead> <tbody> <tr> <td>RPE-Alexa Fluor®750 488nm laser</td> <td>496</td> <td>779</td> </tr> <tr> <td>RPE-Alexa Fluor®750 561nm laser</td> <td>546</td> <td>779</td> </tr> </tbody> </table> | Fluorophore | Excitation Max (nm) | Emission Max (nm) | RPE-Alexa Fluor®750 488nm laser | 496 | 779 | RPE-Alexa Fluor®750 561nm laser | 546 | 779 |
| Fluorophore | Excitation Max (nm) | Emission Max (nm) | | | | | | | | |
| RPE-Alexa Fluor®750 488nm laser | 496 | 779 | | | | | | | | |
| RPE-Alexa Fluor®750 561nm laser | 546 | 779 | | | | | | | | |
| 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 5% Sucrose |
| Immunogen | Mouse spleen dendritic cells. |
| External Database Links | <p>UniProt: Q9QXH4 Related reagents</p> <p>Entrez Gene: 16411 Itgax Related reagents</p> |
| RRID | AB_566465 |
| Fusion Partners | Spleen cells from immunised Armenian Hamster were fused with cells of the Sp2/0 myeloma cell line. |
| Specificity | <p>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.</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> |
| 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> |
| References | <ol style="list-style-type: none"> 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. 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. 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. Lundqvist, J. <i>et al.</i> (2010) Concomitant infection decreases the malaria burden but escalates relapsing fever borreliosis. Infect Immun. 78 (5): 1924-30. 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. Goupil, M. <i>et al.</i> (2009) Macrophage-mediated responses to Candida albicans in mice expressing the human immunodeficiency virus type 1 transgene. Infect Immun. 77: 4136-49. Linehan, S.A.. (2005) The mannose receptor is expressed by subsets of APC in non-lymphoid organs. BMC Immunol. 6:4. 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. 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 \(2\) \[Epub ahead of print\].](#)

Storage

Store at +4°C.

DO NOT FREEZE.

This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee 12 months from date of despatch

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Printed on 14 Mar 2024

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