Datasheet: MCA1369P750

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

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 Stabilisers

0.09% Sodium Azide
1% Bovine Serum Albumin
5% Sucrose

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.
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 10ul of the suggested working dilution to label 10^6 cells in 100ul. 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).
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. Metlay, J.P. *et al.* (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. *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. 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. 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. 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.
16. 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.
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].

Storage	Store at +4^{o}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.
Shelf Life	12 months from date of reconstitution.
Acknowledgements	This product is provided under an intellectual property license from Life Technologies Corporation. The transfer of this product is contingent on the buyer using the purchased product solely in research conducted by the buyer, excluding contract research or any fee for service research, and the buyer must not sell or otherwise transfer this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; (c) manufacturing or quality assurance or quality control, or (d) resale, whether or not resold for use in research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad, CA 92008 USA or outlicensing@thermofisher.com
Health And Safety Information	Material Safety Datasheet documentation #10075 available at: 10075: https://www.bio-rad-antibodies.com/uploads/MSDS/10075.pdf
Regulatory	For research purposes only

North & South America Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com
Worldwide Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com
Europe Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com