Datasheet: MCA1369 BATCH NUMBER 163767

Description:	HAMSTER ANTI MOUSE CD11c
Specificity:	CD11c
Other names:	INTEGRIN ALPHA X CHAIN
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	N418
Isotype:	lgG
Quantity:	0.25 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.biorad-antibodies.com/protocols.

		Yes	No	Not Determined	Suggested Dilution	
	Flow Cytometry	•			1/25 - 1/100	
	Immunohistology - Frozen	•				
	Immunohistology - Paraffin					
	ELISA					
	Immunoprecipitation	•				
	Western Blotting					
	Immunofluorescence	•				
	Where this product has no	ot been t	ested for	use in a particular tech	nnique this does not	
	o ,	a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.				
arget Species	Mouse					
Product Form	Purified IgG - liquid					
Preparation	Purified IgG prepared by supernatant	affinity c	hromatog	raphy on Protein A fror	n tissue culture	

 Buffer Solution
 Phosphate buffered saline

 Preservative
 0.00% continue ratio

0.09% sodium azide (NaN₃)

Stabilisers

Carrier Free	Yes			
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml			
Immunogen	Mouse spleen dendritic cells.			
External Database				
Links	UniProt:			
	Q9QXH4 Related reagents			
	Entrez Gene:			
	16411 Itgax Related reagents			
RRID	AB_324490			
Fusion Partners	Spleen cells from immunized 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 <i>in vivo</i> (<u>Wang <i>et al.</i> 2000</u>).			
Flow Cytometry	Use 10µl of the suggested working dilution to label 10^6 cells in $100µl$			
References	1. Crowley, M.T. et al. (1990) Use of the fluorescence activated cell sorter to enrich			
	dendritic cells from mouse spleen. <u>J Immunol Methods. 133 (1): 55-66.</u>			
	2. 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. <u>J Immunol.</u> <u>160: 3585-93.</u>			
	3. Nunez, R. <i>et al.</i> (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.			
	4. Wang, H. et al. (2000) Rapid antibody responses by low-dose, single-step, dend			
	cell-targeted immunization. Proc Natl Acad Sci U S A. 97 (2): 847-52.			
5. Gonzalez-Juarrero, M. and Orme, I.M. (2001) Characterization of murine lung				
	cells infected with <i>Mycobacterium tuberculosis</i> . <u>Infect Immun. 69: 1127-33.</u>			
	6. 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.			
	7. 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.			
	8. 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. <u>J Virol. 76: 2899-911.</u>			

9. Dimier-Poisson, I. *et al.* (2003) Protective mucosal Th2 immune response against Toxoplasma gondii by murine mesenteric lymph node dendritic cells. <u>Infect Immun. 71:</u> <u>5254-65.</u>

10. 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.

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. <u>Respir Res. 6: 70.</u>
 Linehan, S.A.. (2005) The mannose receptor is expressed by subsets of APC in non-lymphoid organs. <u>BMC Immunol. 6:4.</u>

13. 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 <u>Arterioscler Thromb</u> <u>Vasc Biol. 25: 2386-91.</u>

14. Ponce, L.V. *et al.* (2005) Adoptive transfer of dendritic cells modulates immunogenesis and tolerogenesis in a neonatal model of murine cutaneous leishmaniasis. <u>Kinetoplastid</u> <u>Biol Dis. 4: 2.</u>

15. Meng, Q. *et al.* (2007) Phenotypes, distribution, and morphological features of antigen-presenting cells in the murine cornea following intravitreal injection. <u>Mol Vis. 13: 475-86.</u>
16. Goupil, M. *et al.* (2009) Macrophage-mediated responses to Candida albicans in mice expressing the human immunodeficiency virus type 1 transgene. <u>Infect Immun. 77: 4136-49.</u>

17. Lundqvist, J. *et al.* (2010) Concomitant infection decreases the malaria burden but escalates relapsing fever borreliosis. <u>Infect Immun. 78 (5): 1924-30.</u>

18. Zhang, L. *et al.* (2011) The inflammatory changes of adipose tissue in late pregnant mice. <u>J Mol Endocrinol. 47 (2): 157-65.</u>

19. Donaldson, D.S. *et al.* (2012) M cell-depletion blocks oral prion disease pathogenesis. <u>Mucosal Immunol. 5: 216-25.</u>

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. <u>Am J</u> <u>Physiol Endocrinol Metab. 305 (11): E1415-25.</u>

21. Kan, M.J. *et al.* (2015) Arginine deprivation and immune suppression in a mouse model of Alzheimer's disease. <u>J Neurosci. 35 (15): 5969-82.</u>

22. Kayser, B.D. *et al.* (2015) Perinatal Overnutrition Exacerbates Adipose Tissue Inflammation Caused by High-Fat Feeding in C57BL/6J Mice. <u>PLoS One. 10 (3)</u>: <u>e0121954.</u>

23. Powell, J.J. *et al.* (2015) An endogenous nanomineral chaperones luminal antigen and peptidoglycan to intestinal immune cells. <u>Nat Nanotechnol. 10 (4): 361-9.</u>

24. Sehgal, A. *et al.* (2017) c-Rel is dispensable for the differentiation and functional maturation of M cells in the follicle-associated epithelium. <u>Immunobiology. 222 (2): 316-26.</u>
25. 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. <u>Vet Immunol Immunopathol. 198: 44-53.</u>

26. 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): 4493.

27. lida, 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. <u>J Immunother Cancer. 8 (2): e000582.</u> 28. Kouwenberg, M. <i>et al.</i> (2021) Reduced CXCL1 production by endogenous IL-37
	expressing dendritic cells does not affect T cell activation. PLoS One. 16 (5): e0251809.
	29. Mohanta, S.K. et al. (2022) Neuroimmune cardiovascular interfaces control
	atherosclerosis. <u>Nature. 605 (7908): 152-159.</u>
	30. Mihindukulasooriya, 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 <u>Algae. 37 (4): 331-347.</u>
	31. Hirano, R. et al. (2023) Tissue-resident macrophages are major tumor-associated
	macrophage resources, contributing to early TNBC development, recurrence, and metastases Commun Biol. 6 (1): 144.
	32. Wang, M.Y. <i>et al.</i> (2024) Downregulation of the kidney glucagon receptor, essential for
	renal function and systemic homeostasis, contributes to chronic kidney disease. <u>Cell</u>
	Metab. :S1550-4131(23)00475-8.
	33. Ni, Y. et al. (2022) CX3CL1/CX3CR1 interaction protects against lipotoxicity-induced
	nonalcoholic steatohepatitis by regulating macrophage migration and M1/M2 status.
	Metabolism. 136: 155272.
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.
Guarantee	12 months from date of despatch
Health And Safety	Material Safety Datasheet documentation #10040 available at:
Information	https://www.bio-rad-antibodies.com/SDS/MCA1369
	10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Hamster IgG (STAR104...) <u>DyLight®550</u>, <u>DyLight®650</u>, <u>DyLight®800</u>,

<u>FITC</u>

Goat Anti Hamster IgG (STAR79...) Biotin, FITC, HRP

Recommended Negative Controls

HAMSTER (ARMENIAN) IgG NEGATIVE CONTROL (MCA2356)

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

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