

Datasheet: MCA1369SBUV400

Description:	HAMSTER ANTI MOUSE CD11c:StarBright UltraViolet 400
Specificity:	CD11c
Other names:	CD11, INTEGRIN ALPHA X CHAIN
Format:	StarBright UltraViolet 400
Product Type:	Monoclonal Antibody
Clone:	N418
Isotype:	IgG
Quantity:	100 TESTS/0.5ml

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)	▪			Neat

Where this product 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 product for use in their own system using appropriate negative/positive controls.

(1) Staining at lower temperatures generally requires longer incubation to reach antibody binding equilibrium, and this effect is more pronounced for StarBright Dyes due to their larger size. For optimum staining, Bio-Rad recommends incubating samples either overnight at 4°C or 1 hour at room temperature.

Target Species	Mouse		
Product Form	Purified IgG conjugated to StarBright UltraViolet 400 - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	StarBright UltraViolet 400	335	394
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		

Preservative Stabilisers	0.09% Sodium Azide (NaN ₃) 1% Bovine Serum Albumin 0.1% Pluronic F68 0.1% PEG 3350 0.05% Tween 20
Approx. Protein Concentrations	For information on the concentration of our StarBright Dye conjugated reagents please visit our FAQ page.
Immunogen	Mouse spleen dendritic cells.
External Database Links	UniProt: Q9QXH4 Related reagents Entrez Gene: 16411 Itgax Related reagents
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> (Wang et al. 2000).
Flow Cytometry	Use 5µl of the suggested working dilution to label 0.5x10 ⁶ cells in 100µl. Best practices suggest a 5 min centrifugation at 6,000g prior to sample application.
References	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. 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. 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. <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. 5. 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. 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. [J Virol. 76: 2899-911.](#)
9. 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.](#)
 10. Bjorck, P. (2004) Dendritic cells exposed to herpes simplex virus *in vivo* do not produce IFN- α after rechallenge with virus *in vitro* and exhibit decreased T cell alloreactivity. [J Immunol. 172: 5396-404.](#)
 11. 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.](#)
 12. Linehan, S.A.. (2005) The mannose receptor is expressed by subsets of APC in non-lymphoid organs. [BMC Immunol. 6:4.](#)
 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 [Arterioscler Thromb Vasc Biol. 25: 2386-91.](#)
 14. 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.](#)
 15. 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.](#)
 16. 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.](#)
 17. Lundqvist, J. *et al.* (2010) Concomitant infection decreases the malaria burden but escalates relapsing fever borreliosis. [Infect Immun. 78 \(5\): 1924-30.](#)
 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. Powell, J.J. *et al.* (2015) An endogenous nanomineral chaperones luminal antigen and peptidoglycan to intestinal immune cells. [Nat Nanotechnol. 10 \(4\): 361-9.](#)
 24. 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.](#)
 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. [Vet Immunol Immunopathol. 198: 44-53.](#)
 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. 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 \(2\): e000582.](#)
28. Kouwenberg, M. *et al.* (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. [Nature. 605 \(7908\): 152-159.](#)
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 [Algae. 37 \(4\): 331-347.](#)
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. *et al.* (2024) Downregulation of the kidney glucagon receptor, essential for renal function and systemic homeostasis, contributes to chronic kidney disease. [Cell 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. Store at +4°C. DO NOT FREEZE. This product should be stored undiluted.
Guarantee	12 months from date of despatch
Acknowledgements	This product is covered by U.S. Patent No. 10,150,841 and related U.S. and foreign counterparts
Health And Safety Information	Material Safety Datasheet documentation #20471 available at: https://www.bio-rad-antibodies.com/SDS/MCA1369SBUV400
Regulatory	For research purposes only

Related Products

Recommended Useful Reagents

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

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

Product inquiries: www.bio-rad-antibodies.com/technical-support

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets
'M451618:260710'

Printed on 20 Aug 2026