Antibodies

Anti-Mouse CD11c Antibody, Clone N418, Biotin

Hamster (Armenian) monoclonal IgG antibody against mouse CD11c, biotin-conjugated

Catalog	#60002BT	500 µg	0.5 mg/mL
	#100-0442	100 µg	0.5 mg/mL
	#100-0441	25 µg	0.5 mg/mL

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Product Description

The N418 antibody reacts with CD11c (αX integrin), a 150 kDa type 1 transmembrane glycoprotein that associates non-covalently with CD18 (β2 integrin) to form a heterodimeric cell surface adhesion receptor. Through its interaction with ligands such as iC3b, fibrinogen, and CD54, the CD11c/CD18 receptor is involved in several immune response processes, including cell migration, stimulation of cytokine production by monocytes and macrophages, T cell proliferation, leukocyte recruitment, and phagocytosis. In mice, CD11c is expressed on dendritic cells, macrophages, monocytes, granulocytes, NK cells, and a subset of T cells.

Target Antigen Name:	CD11c
Alternative Names:	alphaX integrin, CR4, integrin alphaX chain, p150
Gene ID:	16411
Species Reactivity:	Mouse
Host Species:	Hamster (Armenian)
Clonality:	Monoclonal
Clone:	N418
Isotype:	IgG
Immunogen:	Mouse spleen dendritic cells
Conjugate:	Biotin

Applications

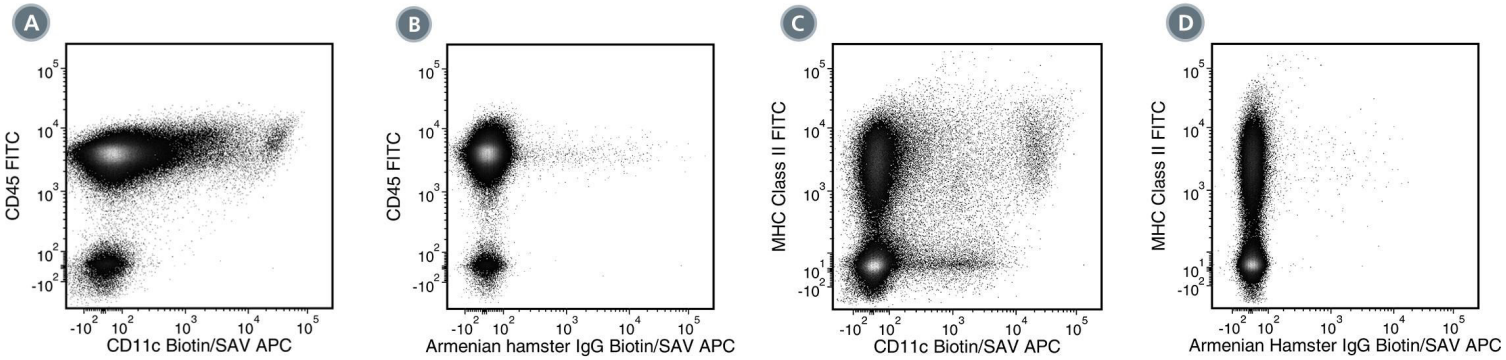
Verified:	CellSep, FC
Reported:	FC, ICC, IF
Special Applications:	This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ Mouse CD11c Positive Selection Kit II (Catalog #18780).

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FACS: Fluorescence-activated cell sorting; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

Properties

Formulation:	Phosphate-buffered saline, pH 7.2, containing 0.09% sodium azide
Purification:	The antibody was purified by affinity chromatography and conjugated with biotin under optimal conditions. The solution is free of unconjugated biotin.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. Stable until expiry date (EXP) on label.
Directions for Use:	For flow cytometry, the suggested use of this antibody is ≤ 0.03 µg per 1 x 10^6 cells in 100 µL. It is recommended that the antibody be titrated for optimal performance for each application.

Data



(A) Flow cytometry analysis of C57BL/6 mouse splenocytes labeled with Anti"Mouse CD11c Antibody, Clone N418, Biotin followed by streptavidin (SAV) APC and Anti-Mouse CD45 Antibody, Clone 30-F11, FITC (Catalog #60030FI).
(B) Flow cytometry analysis of C57BL/6 mouse splenocytes labeled with a biotinylated Armenian hamster IgG, isotype control antibody followed by SAV APC and Anti-Mouse CD45 Antibody, Clone 30-F11, FITC.
(C) Flow cytometry analysis of C57BL/6 mouse splenocytes labeled with Anti"Mouse CD11c Antibody, Clone N418, Biotin, followed by SAV APC and an anti-mouse MHC class II antibody, FITC.
(D) Flow cytometry analysis of C57BL/6 mouse splenocytes labeled with a biotinylated Armenian hamster IgG, isotype control antibody followed by SAV APC and an anti-mouse MHC class II antibody, FITC.

Related Products

For a complete list of antibodies, including other conjugates, sizes and clones, as well as related products available from STEMCELL Technologies, visit www.stemcell.com/antibodies or contact us at techsupport@stemcell.com.

References

1. Kotov DI et al. (2019) TCR affinity biases Th cell differentiation by regulating CD25, Eef1e1, and Gbp2. J Immunol 202(9): 2535–45. (IF)
2. Kim CW et al. (2019) Exogenous Interleukin-33 contributes to protective immunity via cytotoxic T-cell priming against mucosal influenza viral infection. Viruses 11(9). (FC)
3. Kotov JA & Jenkins MK. (2019) Cutting edge: T cell–dependent plasmablasts form in the absence of single differentiated CD4+ T cell subsets. J Immunol 202(2): 401–5. (FC)
4. Ebrahimi-Nik H et al. (2018) CD11c+ MHCIIlo GM-CSF-bone marrow-derived dendritic cells act as antigen donor cells and as antigen presenting cells in neoepitope-elicited tumor immunity against a mouse fibrosarcoma. Cancer Immunol Immunother 67(9): 1449–59. (FC)
5. Lai JD et al. (2018) Early cellular interactions and immune transcriptome profiles in human factor VIII-exposed hemophilia A mice. J Thromb Haemost 16(3): 533–45. (FC, IF, IHC)
6. Oderup C et al. (2013) Canonical and noncanonical Wnt proteins program dendritic cell responses for tolerance. J Immunol 190(12): 6126–34. (FC)
7. Schneider D et al. (2012) Neonatal rhinovirus infection induces mucous metaplasia and airways hyperresponsiveness. J Immunol 188(6): 2894–904. (FC)
8. Grewal JS et al. (2011) Salivary glands act as mucosal inductive sites via the formation of ectopic germinal centers after site-restricted MCMV infection. FASEB J 25(5): 1680–96. (IF, IHC)
9. Bankoti J et al. (2010) Effects of TCDD on the fate of naive dendritic cells. Toxicol Sci 115(2): 422–34. (FC)
10. Roland CL et al. (2009) Inhibition of vascular endothelial growth factor reduces angiogenesis and modulates immune cell infiltration of orthotopic breast cancer xenografts. Mol Cancer Ther 8(7): 1761–71. (FC, IHC)
11. You Y et al. (2009) Cutting edge: primary and secondary effects of CD19 deficiency on cells of the marginal zone. J Immunol 182(12): 7343–7. (IF, IHC)
12. Cervantes-Barragan L et al. (2007) Control of coronavirus infection through plasmacytoid dendritic-cell-derived type I interferon. Blood 109(3): 1131–7. (FC)
13. Turnquist HR et al. (2007) Rapamycin-conditioned dendritic cells are poor stimulators of allogeneic CD4+ T cells, but enrich for antigen-specific Foxp3+ T regulatory cells and promote organ transplant tolerance. J Immunol 178(11): 7018–31. (FC)
14. Chin RK et al. (2006) Lymphotoxin pathway-directed, autoimmune regulator-independent central tolerance to arthritogenic collagen. J Immunol 177(1): 290–7. (IF, IHC)
15. Kishimoto T et al. (Eds.). (1998) Leucocyte Typing VI: White Cell Differentiation Antigens. New York: Garland Publishing Inc.
16. Barclay AN et al. (Eds.). (1997) The Leucocyte Antigen Factsbook, Second Edition (pp. 149–51). New York: Academic Press.
17. Metlay JP 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. (FA/Blocking, FC, IHC, IP)