Anti-Mouse CD11c Antibody, Clone N418, PE

Antibodies

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

Catalog	#100-0446	100 µg	0.2 mg/mL
	#100-0445	25 µg	0.2 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:	PE (Phycoerythrin)

Applications

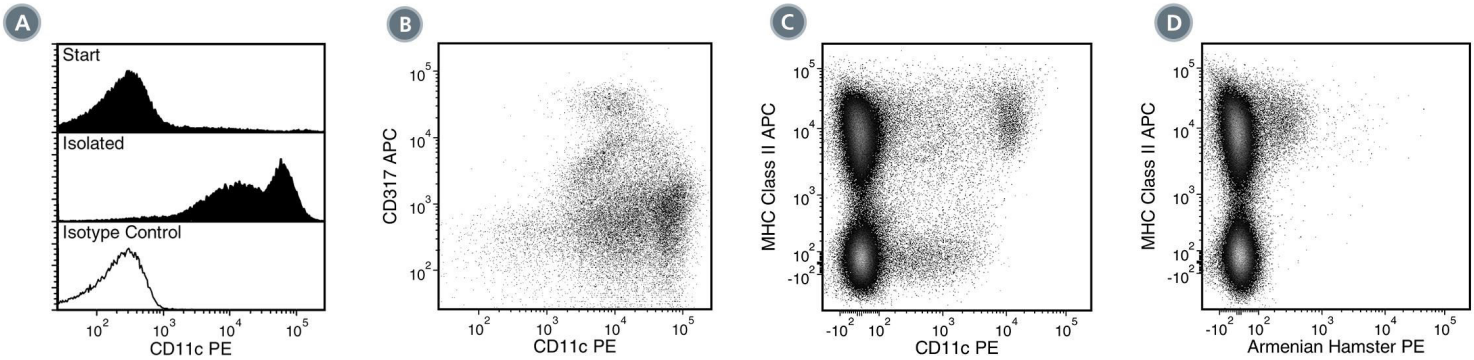
Verified:	CellSep, FC
Reported:	FC
Special Applications:	This antibody clone has been verified for purity assessments of cells isolated with EasySep™ kits, including EasySep™ Mouse CD11c Positive Selection Kit II (Catalog #18780).

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 and 0.1% gelatin
Purification:	The antibody was purified by affinity chromatography and conjugated with PE under optimal conditions. The solution is free of unconjugated PE.
Stability and Storage:	Product stable at 2 - 8°C when stored undiluted. Do not freeze. Protect product from prolonged exposure to light. Stable until expiry date (EXP) on label.
Directions for Use:	For flow cytometry, the suggested use of this antibody is ≤ 0.25 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 processed with EasySep™ Mouse CD11c Positive Selection Kit II and labeled with Anti-Mouse CD11c Antibody, Clone N418, PE. Histograms show labeling of splenocytes (Start) and isolated cells (Isolated). Labeling of the start cells with an Armenian hamster IgG PE isotype control antibody is shown in the bottom panel (solid line histogram).
(B) Flow cytometry analysis of C57BL/6 mouse splenocytes processed with EasySep™ Mouse CD11c Positive Selection Kit II and labeled with Anti-Mouse CD11c Antibody, Clone N418, PE and an anti"mouse CD317 antibody, APC.
(C) Flow cytometry analysis of C57BL/6 mouse splenocytes labeled with Anti"Mouse CD11c Antibody, Clone N418, PE and an anti"mouse MHC class II antibody, APC.
(D) Flow cytometry analysis of C57BL/6 mouse splenocytes labeled with an Armenian hamster IgG PE isotype control antibody and an anti"mouse MHC class II antibody, APC.

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)