

APC anti-mouse CD11a Antibody

Catalog# / Size	101119 / 25 µg 101120 / 100 µg
Clone	M17/4
Regulatory Status	RUO
Other Names	α _L integrin, LFA-1 α subunit, Ly-15, Ly-21, ITGAL
Isotype	Rat IgG2a, κ
Description	CD11a is a 180 kD glycoprotein, also known as α _L integrin, LFA-1 α, Ly-15, or Ly-21. It is a member of the integrin family, primarily expressed on lymphocytes, monocytes/macrophages, and granulocytes. In association with CD18, the CD11a/CD18 complex forms LFA-1. CD11a plays an important role in intercellular adhesion and costimulation by binding its ligands, ICAM-1 (CD54), ICAM-2 (CD102), and ICAM-3 (CD50).

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	C57BL/6 mouse splenic secondary cytotoxic T cells
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography and conjugated with APC under optimal conditions.
Concentration	0.2 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	FC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis . For flow cytometric staining, the suggested use of this reagent is ≤0.5 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.
Excitation Laser	Red Laser (633 nm)
Application Notes	The M17/4 antibody can block CD11a-mediated cellular adhesion. Additional reported applications of this antibody (for the relevant formats) include: immunoprecipitation ^{1,2} , <i>in vitro</i> blocking of cell-cell adhesion ^{1,2} and FOXP3 expression ⁵ , and immunohistochemical staining of acetone-fixed frozen sections ³ . The M17/4 antibody does not block the binding of 2D7 antibody (Cat. No. 101002) to CD11a. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 101110). For <i>in vivo</i> studies or highly sensitive assays, we recommend Ultra-LEAF™ purified antibody (Cat. No. 101118) with a lower endotoxin limit than standard LEAF™ purified antibodies (Endotoxin <0.01 EU/µg).

Application References

(PubMed link indicates BioLegend citation)

1. Sanchez-Madrid F, *et al.* 1982. *Cell Immunol.* 73:1. (IP, Block)
2. Kuhlman P, *et al.* 1991. *J. Immunol.* 146:1773. (IP, Block)
3. Mizgerd JP, *et al.* 1997. *J. Exp. Med.* 186:1357. (IHC)
4. Hailman E and Allen PM. 2005. *J. Immunol.* 175:4847. (FC)
5. Verhagen J and Wraith DC. 2014. *J. Immunol. Methods.* S0022. (Block) [PubMed](#)

Product Citations

1. Hodgins B, *et al.* 2019. *Immun Ageing.* 16:27. [PubMed](#)
2. Green WD, *et al.* 2022. *J Leukoc Biol.* 111:147. [PubMed](#)
3. Zhu YP *et al.* 2018. *Cell reports.* 24(9):2329-2341. [PubMed](#)

RRID AB_2562778 (BioLegend Cat. No. 101119)
AB_2562779 (BioLegend Cat. No. 101120)

Antigen Details

Structure	Integrin family, associates with integrin β 2 (CD18), 180 kD
Distribution	Lymphocytes, granulocytes, monocytes, macrophages
Function	Cellular adhesion
Ligand/Receptor	ICAM-1 (CD54), ICAM-2 (CD102), ICAM-3 (CD50)
Cell Type	Granulocytes, Lymphocytes, Macrophages, Monocytes, Tregs
Biology Area	Cell Adhesion, Cell Biology, Costimulatory Molecules, Immunology, Innate Immunity, Neuroinflammation, Neuroscience
Molecular Family	Adhesion Molecules, CD Molecules
Antigen References	1. Barclay A, <i>et al.</i> 1997. The Leukocyte Antigen FactsBook Academic Press. 2. Springer TA. 1994. <i>Cell</i> 76:301. 3. Lub M, <i>et al.</i> 1995. <i>Immunol. Today</i> 16:479.
Gene ID	16408

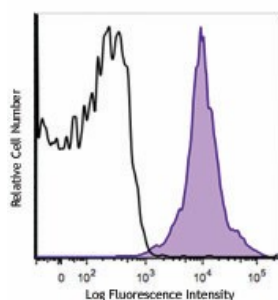
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Biotin anti-mouse CD11a, FITC anti-mouse CD11a, LEAF™ Purified anti-mouse CD11a, PE anti-mouse CD11a, Purified anti-mouse CD11a, Alexa Fluor® 488 anti-mouse CD11a, Alexa Fluor® 647 anti-mouse CD11a, APC anti-mouse CD11a, Ultra-LEAF™ Purified anti-mouse CD11a, PE/Cyanine7 anti-mouse CD11a, PerCP/Cyanine5.5 anti-mouse CD11a, TotalSeq™-A0595 anti-mouse CD11a, TotalSeq™-C0595 anti-mouse CD11a, TotalSeq™-B0595 anti-mouse CD11a

Product Data



C57BL/6 mouse splenocytes were stained with CD11a (clone M17/4) APC (filled histogram) or rat IgG2a, κ APC isotype control (open histogram).

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