

APC/Fire™ 750 anti-mouse/human CD11b Antibody

Catalog# / Size	101261 / 25 µg 101262 / 100 µg
Clone	M1/70
Regulatory Status	RUO
Other Names	αM integrin, Mac-1, Mo1, CR3, Ly-40, C3biR, ITGAM
Isotype	Rat IgG2b, κ
Description	CD11b is a 170 kD glycoprotein also known as αM integrin, Mac-1 α subunit, Mol, CR3, and Ly-40. CD11b is a member of the integrin family, primarily expressed on granulocytes, monocytes/macrophages, dendritic cells, NK cells, and subsets of T and B cells. CD11b non-covalently associates with CD18 (β2 integrin) to form Mac-1. Mac-1 plays an important role in cell-cell interaction by binding its ligands ICAM-1 (CD54), ICAM-2 (CD102), ICAM-4 (CD242), iC3b, and fibrinogen.

Product Details

Verified Reactivity	Mouse, Human, Cynomolgus, Rhesus
Reported Reactivity	Chimpanzee, Baboon, Rabbit
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	C57BL/10 splenocytes
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography and conjugated with APC/Fire™ 750 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 ≤0.25 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application. * APC/Fire™ 750 has a maximum excitation of 650 nm and a maximum emission of 787 nm.
Application Notes	Clone M1/70 has been verified for immunocytochemistry (ICC) and frozen immunohistochemistry (IHC-F). Additional reported applications (for relevant formats of this clone) include: immunoprecipitation ^{1,4} , <i>in vitro</i> blocking ^{3,9,12} , depletion ^{2,8} , immunofluorescence microscopy ^{6,7,10} , immunohistochemistry of acetone-fixed frozen sections ^{5,11-13} , and spatial biology (IBEX) ^{35,36} . For <i>in vivo</i> studies or highly sensitive assays, we recommend Ultra-LEAF™ purified antibody (Endotoxin < 0.01 EU/µg, Azide-Free, 0.2 µm filtered) (Cat. No. 101248).
Application References	<ol style="list-style-type: none"> 1. Springer T, <i>et al.</i> 1978. <i>Eur. J. Immunol.</i> 8:539. (IP) 2. Ault K and Springer T. 1981. <i>J. Immunol.</i> 126:359. (Deplete) 3. Springer TA, <i>et al.</i> 1982. <i>Immunol. Rev.</i> 68:171. (Block) 4. Ho MK and Springer TA. 1983. <i>J. Biol. Chem.</i> 258:2766. (IP) 5. Flotte TJ, <i>et al.</i> 1983. <i>Am. J. Pathol.</i> 111:112. (IHC) 6. Noel GJ, <i>et al.</i> 1990. <i>J. Clin. Invest.</i> 85:208. (IF) 7. Allen LA and Aderem A. 1996. <i>J. Exp. Med.</i> 184:627 (IF)
(PubMed link indicates BioLegend citation)	

8. D'Amico A and Wu L. 2003. *J. Exp. Med.* 198:293. (Deplete)
9. Brickson SJ, *et al.* 2003. *Appl Physiol.* 95:969. (Block)
10. Clatworthy MR and Smith KG. 2004. *J. Exp. Med.* 199:717. (IF)
11. Hata H, *et al.* 2004. *J. Clin. Invest.* 114:582. (IHC)
12. Zhang Y, *et al.* 2002. *J. Immunol.* 168:3088. (IHC)
13. Iwasaki A and Kelsall BL. 2001. *J. Immunol.* 166:4884 (IHC, FC)
14. Tailleux L. 2003. *J. Exp. Med.* 197:121. (Block, FC)
15. Olver S, *et al.* 2006. *Cancer Research* 66:571. (FC)
16. Tan SL, *et al.* 2006. *J. Immunol.* 176:2872. (FC) [PubMed](#)
17. Ponomarev ED, *et al.* 2006. *J. Immunol.* 176:1402. (FC)
18. Dzhagalov I, *et al.* 2007. *Blood* 109:1620. (FC)
19. Fazilleau N, *et al.* 2007. *Nature Immunol.* 8:753.
20. Rasmussen JW, *et al.* 2006. *Infect. Immun.* 74:6590. [PubMed](#)
21. Napimoga MH, *et al.* 2008. *J. Immunol.* 180:609. [PubMed](#)
22. Elqaraz-Carmon V, *et al.* 2008. *J. Lipid. Res.* 49:1894. [PubMed](#)
23. Kim DD, *et al.* 2008. *Blood* 112:1109. [PubMed](#)
24. Guo Y, *et al.* 2008. *Blood* 112:480. [PubMed](#)
25. Norian LA, *et al.* 2009. *Cancer Res.* 69:3086. (FC) [PubMed](#)
26. Baumgartner CK, *et al.* 2010. *J. Immunol.* 184:573. [PubMed](#)
27. Charles N, *et al.* 2010. *Nat. Med.* 16:701. (FC) [PubMed](#)
28. Whiteland J, *et al.* 1995. *J. Histochem. Cytochem.* 43:313. (IHC)
29. Weber GF, *et al.* 2014. *J Exp Med.* 211:1243. [PubMed](#)
30. Ashok A, *et al.* 2015. *Toxicol Sci.* 143:64. [PubMed](#)
31. Price PJ, *et al.* 2015. *J Immunol.* 194:1164. [PubMed](#)
32. Doni A, *et al.* 2015. *J Exp Med.* 212:905. [PubMed](#)
33. Ferreira R, *et al.* 2016. *J Infect Dis.* 213: 669 - 673. [PubMed](#)
34. Peterson VM, *et al.* 2017. *Nat. Biotechnol.* 35:936. (PG)
35. Radtke AJ, *et al.* 2020. *Proc Natl Acad Sci U S A.* 117:33455-65. (SB) [PubMed](#)
36. Radtke AJ, *et al.* 2022. *Nat Protoc.* 17:378-401. (SB) [PubMed](#)

Product Citations

1. Rappazzo CG, *et al.* 2020. *bioRxiv.* . [PubMed](#)
2. Hagan N, *et al.* 2020. *Cell Death Dis.* 1.086111111. [PubMed](#)
3. Mathur S, *et al.* 2021. *JCI Insight.* 6:. [PubMed](#)
4. Sharma D, *et al.* 2022. *Commun Biol.* 5:479. [PubMed](#)
5. Li Y, *et al.* 2021. *Brain Behav Immun.* 91:267. [PubMed](#)
6. Barman PK, *et al.* 2019. *J Immunol.* 202:2720. [PubMed](#)
7. Stotesbury C, *et al.* 2020. *J Immunol.* 204:1582. [PubMed](#)
8. Cohen SB *et al.* 2018. *Cell host & microbe.* 24(3):439-446 . [PubMed](#)
9. Barsoumian HB, *et al.* 2020. *J Immunother Cancer.* 8:00. [PubMed](#)
10. Matsumoto K, *et al.* 2017. *PLoS One.* 12(6):e0175406. [PubMed](#)
11. Engler AE, *et al.* 2020. *Cell Reports.* 33(13):108553. [PubMed](#)
12. Ritzel RM, *et al.* 2021. *Glia.* 69:746. [PubMed](#)
13. Melo-Silva CR, *et al.* 2021. *PLOS Pathogens.* 17(5):e1009593. [PubMed](#)
14. Cartwright ANR, *et al.* 2021. *Cancer Immunol Res.* 9:470. [PubMed](#)
15. Lam KC, *et al.* 2021. *Cell.* 184:5338. [PubMed](#)
16. Alhudaithi SS, *et al.* 2020. *Mol Pharm.* 17:4691. [PubMed](#)
17. Sugita Y, *et al.* 2021. *Oncol Rep.* 45:. [PubMed](#)
18. Li Y, *et al.* 2022. *Theranostics.* 12:5364. [PubMed](#)
19. Tao Z, *et al.* 2022. *Cells.* 11:. [PubMed](#)
20. Stotesbury C, *et al.* 2020. *Aging Cell.* 19:e13170. [PubMed](#)
21. Barsoumian HB, *et al.* 2022. *Cancers (Basel).* 14:. [PubMed](#)
22. Teng F, *et al.* 2021. *Cell Rep.* 37:110051. [PubMed](#)
23. Kurashima Y, *et al.* 2021. *Nat Commun.* 12:1067. [PubMed](#)
24. Li Y, *et al.* 2020. *Theranostics.* 10:11376. [PubMed](#)
25. Kumar D, *et al.* 2018. *Cancer Prev Res (Phila).* 0.895138889. [PubMed](#)
26. Caetano MS, *et al.* 2019. *Clin Cancer Res.* 25:7576. [PubMed](#)
27. Goc J, *et al.* 2021. *Cell.* .: [PubMed](#)
28. Schuran FA, *et al.* 2020. *Cell Mol Gastroenterol Hepatol.* . [PubMed](#)
29. Safae MM, *et al.* 2022. *Sci Rep.* 12:1464. [PubMed](#)
30. C Khouili S, *et al.* 2020. *Cell Rep.* 33:108468. [PubMed](#)

RRID

AB_2572121 (BioLegend Cat. No. 101261)
 AB_2572122 (BioLegend Cat. No. 101262)

Antigen Details

Structure	Integrin family, associates with integrin β_2 (CD18), 170 kD
Distribution	Granulocytes, monocytes/macrophages, dendritic cells, NK cells, subsets of T and B cells
Function	Adhesion, chemotaxis
Ligand/Receptor	ICAM-1 (CD54), ICAM-2 (CD102), ICAM-4 (CD242), iC3b, fibrinogen
Cell Type	B cells, Dendritic cells, Granulocytes, Macrophages, Monocytes, Neutrophils, NK cells, T cells,

Tregs

Biology Area

Cell Adhesion, Cell Biology, Costimulatory Molecules, Immunology, Innate Immunity, Neuroscience, Neuroscience Cell Markers

Molecular Family

Adhesion Molecules, CD Molecules

Antigen References

1. Barclay A, *et al.* 1997. *The Leukocyte Antigen FactsBook* Academic Press.
2. Springer TA. 1994. *Cell* 76:301.
3. Coxon A, *et al.* 1996. *Immunity* 5:653.

Gene ID

[16409](#)

[3684](#)

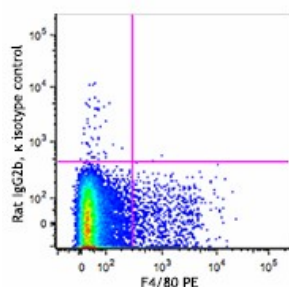
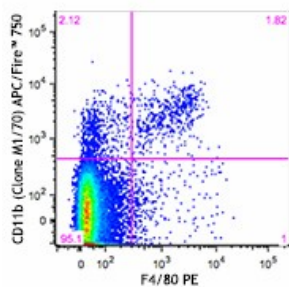
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

APC anti-mouse/human CD11b, Biotin anti-mouse/human CD11b, FITC anti-mouse/human CD11b, PE anti-mouse/human CD11b, PE/Cyanine5 anti-mouse/human CD11b, Purified anti-mouse/human CD11b, PE/Cyanine7 anti-mouse/human CD11b, Alexa Fluor® 488 anti-mouse/human CD11b, Alexa Fluor® 647 anti-mouse/human CD11b, Alexa Fluor® 700 anti-mouse/human CD11b, Pacific Blue™ anti-mouse/human CD11b, APC/Cyanine7 anti-mouse/human CD11b, PerCP/Cyanine5.5 anti-mouse/human CD11b, PerCP anti-mouse/human CD11b, Brilliant Violet 421™ anti-mouse/human CD11b, Brilliant Violet 570™ anti-mouse/human CD11b, Brilliant Violet 605™ anti-mouse/human CD11b, Brilliant Violet 650™ anti-mouse/human CD11b, Brilliant Violet 711™ anti-mouse/human CD11b, Brilliant Violet 785™ anti-mouse/human CD11b, Brilliant Violet 510™ anti-mouse/human CD11b, Ultra-LEAF™ Purified anti-mouse/human CD11b, Purified anti-mouse/human CD11b (Maxpar® Ready), Alexa Fluor® 594 anti-mouse/human CD11b, PE/Dazzle™ 594 anti-mouse/human CD11b, APC/Fire™ 750 anti-mouse/human CD11b, TotalSeq™-A0014 anti-mouse/human CD11b, Brilliant Violet 750™ anti-mouse/human CD11b, TotalSeq™-B0014 anti-mouse/human CD11b, TotalSeq™-C0014 anti-mouse/human CD11b, Spark NIR™ 685 anti-mouse/human CD11b, PE/Fire™ 640 anti-mouse/human CD11b, Spark YG™ 593 anti-mouse/human CD11b, Spark YG™ 570 anti-mouse/human CD11b, PE/Fire™ 810 anti-mouse/human CD11b, APC/Fire™ 810 anti-mouse/human CD11b Antibody, Spark Blue™ 550 anti-mouse/human CD11b, Spark UV™ 387 anti-mouse/human CD11b

Product Data



C57BL/6 splenocytes were blocked with TruStain fcX™ (anti-mouse CD16/32) Antibody then stained with F4/80 PE and CD11b (clone M1/80) APC/Fire™ 750 (top) or Rat IgG2b, κ APC/Fire™ 750 isotype control (bottom).

For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.

*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, www.biolegend.com/ordering#license).

BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

BioLegend Inc., 8999 BioLegend Way, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587