

PE/Fire™ 640 anti-mouse/human CD11b

Catalog # / Size: 1106400 / 100 µg
1106395 / 25 µg

Clone: M1/70

Isotype: Rat IgG2b, κ

Immunogen: C57BL/10 splenocytes

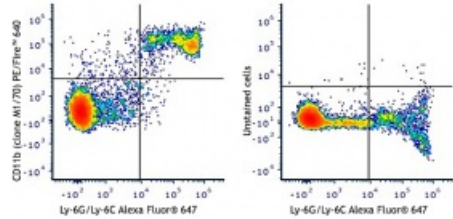
Reactivity: Human, Mouse, Non-human primate, Other

Preparation: The antibody was purified by affinity chromatography and conjugated with PE/Fire™ 640 under optimal conditions.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Workshop Number: 750 under optimal conditions.

Concentration: 0.2 mg/mL

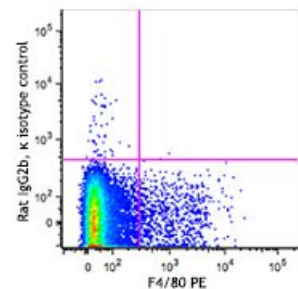


C57BL/6 mouse bone marrow cells were stained with anti-mouse Ly-6G/Ly-6c (Gr-1) Alexa Fluor® 647 and CD11b (clone M1/70) PE/Fire™ 640 (left) or anti-mouse Ly-6G/Ly-6C (Gr-1) Alexa Fluor® 647 only (right).

Applications:

Applications: Flow Cytometry

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.



* PE/Fire™ 640 has a maximum excitation of 566 nm and a maximum emission of 639 nm.

Human paraffin-embedded intestine tissue slices were prepared with a standard protocol of deparaffinization and rehydration. Antigen retrieval was done with Sodium Citrate H.I.E.R. 1X at 95°C for 40 minutes. Tissue was washed with PBS/0.05% Tween 20 twice for five minutes, permeabilized with 0.5% Triton-X 100 for ten minutes and blocked with 5% FBS and 0.2% gelatin for 30 minutes. Then, the tissue was stained with 10 µg/mL of anti-human CD44 (clone IM7) Spark YG™ 570 (red) at 4°C overnight. Nuclei were counterstained with DAPI (blue). The image was captured with a 10X objective.

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}, *in vitro* blocking^{3,9,12}, depletion^{2,8}, immunofluorescence microscopy^{6,7,10}, and immunohistochemistry of acetone-fixed frozen sections^{5,11-13}. For *in vivo* 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:

1. Springer T, *et al.* 1978. *Eur. J. Immunol.* 8:539. (IP)
2. Ault K and Springer T. 1981. *J. Immunol.* 126:359. (Deplete)
3. Springer TA, *et al.* 1982. *Immunol. Rev.* 68:171. (Block)
4. Ho MK and Springer TA. 1983. *J. Biol. Chem.* 258:2766. (IP)
5. Flotte TJ, *et al.* 1983. *Am. J. Pathol.* 111:112. (IHC)
6. Noel GJ, *et al.* 1990. *J. Clin. Invest.* 85:208. (IF)
7. Allen LA and Aderem A. 1996. *J. Exp. Med.* 184:627 (IF)
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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)
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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)

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.

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.