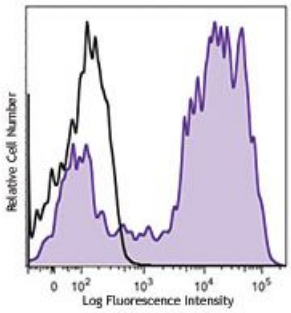
SONY

Product Data Sheet

Brilliant Violet 421™ anti-mouse/human CD11b

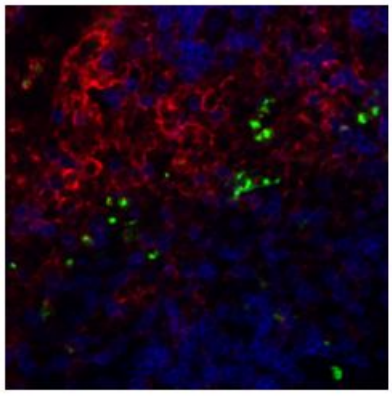
Catalog # / Size:	1106180 / 500 µl 1106175 / 125 µl 1106255 / 50 µg
Clone:	M1/70
Isotype:	Rat IgG2b, κ
Immunogen:	C57BL/10 splenocytes
Reactivity:	Human
Preparation:	The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 421™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 421™ and unconjugated antibody.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).
Concentration:	microg sizes: 0.2 mg/ml microL sizes: lot-specific



C57BL/6 mouse bone marrow cells were stained with CD11b (clone M1/70) Brilliant Violet 421™ (filled histogram) or rat IgG2b, κ Brilliant Violet 421™ isotype control (open histogram). Data shown was gated on myeloid cell population.

Applications:

Applications:	Flow Cytometry



BL/6 mouse lymph nodes, fixed O/N in PLP, blocked with 10% rat serum, stained with CD11b-BV421™ (red), B220-Alexa Fluor® 647 (blue), CD14-FITC (green) in 1% BSA and 0.1% Tween-20 in PBS. Images were acquired with an automated widefield microscop

Recommended Usage:

Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining using the microg size, the suggested use of this reagent is ≤0.25 microg per million cells in 100 microL volume. For flow cytometric staining using the microL sizes, the suggested use of this reagent is ≤5 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 421™ excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet 421™ is a trademark of Sirigen Group Ltd.

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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] and paraffin sections[28]. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 101231). For *in vivo* studies or highly sensitive assays, we recommend Ultra-LEAF™ purified antibody (Cat. No. 101248) with a lower endotoxin limit than standard LEAF™ purified antibodies (Endotoxin <0.01 EU/µg).

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)
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. Price PJ, *et al.* 2015. *J Immunol.* 194:1164. PubMed
31. Doni A, *et al.* 2015. *J Exp Med.* 212:905. PubMed

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.