SONY

Product Data Sheet

Brilliant Violet 510™ anti-mouse/human CD11b

Catalog # / Size: 1106225 / 125 µl
1106315 / 50 µg

Clone: M1/70

Isotype: Rat IgG2b, κ

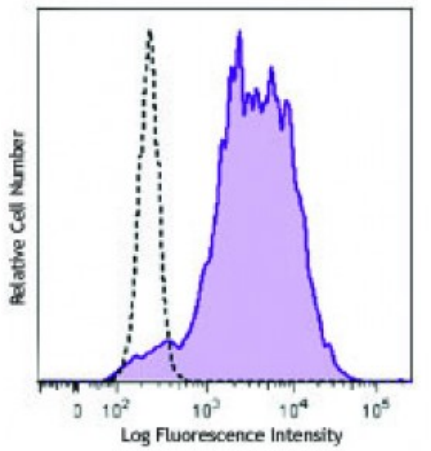
Immunogen: C57BL/10 splenocytes

Reactivity: Human

Preparation: The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 510™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 510™ and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).

Concentration: microg size: 0.2 mg/ml
microL size: Lot-specific



C57BL/6 mouse bone marrow cells were stained with CD11b (clone M1/70) Brilliant Violet 510™. Data shown was gated on the myeloid cell population.

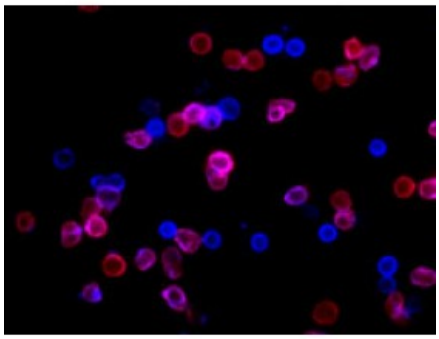
Applications:

Applications: Immunofluorescence

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining using the microL size, the suggested use of this reagent is ≤5 microL per million cells or 5 microL per 100 microL of whole blood. For flow cytometric staining using the microg size, the suggested use of this reagent is ≤0.4 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 510™ excites at 405 nm and emits at 510 nm. The bandpass filter 510/50 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. **Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel.** Refer to your instrument manual or manufacturer for support. Brilliant Violet 510™ is a trademark of Sirigen Group Ltd.

This product is subject to proprietary rights of Sirigen Inc. and is made and sold under license from Sirigen Inc. The



C57 mouse bone marrow cells were fixed with 2% paraformaldehyde (PFA), and then stained with 10 microg/ml of CD11b (clone M1/70) Brilliant Violet 510™ (red) and 10 microg/ml of CD45 (clone 30-F11) Alexa Fluor® 647 (blue) for 30 minutes at ro

purchase of this product conveys to the buyer a non-transferable right to use the purchased product for research purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.

Application Notes: 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/microg).

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. Karsten CM, *et al.* 2015. *J Immunol.* 194:1841. 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.