Product Data Sheet

Brilliant Violet 570™ anti-mouse/human CD11b

Catalog # / 1106165 / 125 μl

Size:

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 570™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 570™

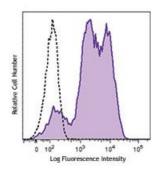
and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide and

BSA (origin USA).

Concentration: Lot-specific



C57BL/6 mouse bone marrow cells were stained with CD11b (clone M1/70) Brilliant Violet 570™ (filled histogram) or rat IgG2b, κ Brilliant Violet 570™ isotype control (open histogram). Data shown was gated on myeloid cell population.

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 ≤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 570™ excites at 405 nm and emits at 570 nm. The bandpass filter 585/42 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 570™ 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 $^{\text{TM}}$ purified antibody (Endotoxin <0.1 EU/ μ g, Azide-Free, 0.2 μ m filtered) is recommended for functional assays (Cat. No. 101231). For *in vivo* studies or highly sensitive assays, we recommend Ultra-LEAF $^{\text{TM}}$ purified antibody (Cat. No. 101248) with a lower endotoxin limit than standard LEAF $^{\text{TM}}$ purified antibodies (Endotoxin <0.01 EU/ μ g).

Application References:

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- 2. Ault K and Springer T. 1981. J. Immunol. 126:359. (Deplete)
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- 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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- 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
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- 18. Dzhagalov I, et al. 2007. Blood 109:1620. (FC)
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- 20. Rasmussen JW, et al. 2006. Infect. Immun.74:6590. PubMed
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- 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)

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 ($\beta 2$ 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.