SONY

Product Data Sheet

Brilliant Violet 650™ anti-human CD11b

Catalog # / Size: 2106675 / 25 tests
2106680 / 100 tests

Clone: ICRF44

Isotype: Mouse IgG1, κ

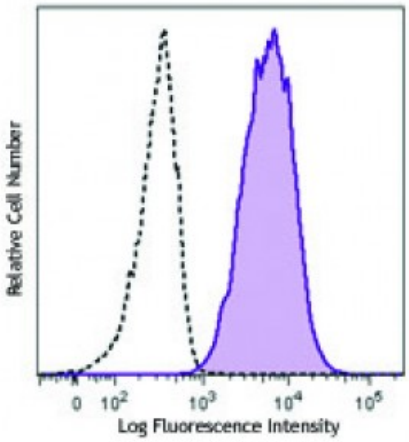
Reactivity: Human

Preparation: The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 650™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 650™ and unconjugated antibody.

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

Workshop Number: IV M047

Concentration: Lot-specific



Human peripheral blood granulocytes were stained with CD11b (clone ICRF44) Brilliant Violet 650™ (filled histogram) or mouse IgG1, κ Brilliant Violet 650™ (open histogram).

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 650™ excites at 405 nm and emits at 645 nm. The bandpass filter 660/20 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 650™ 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 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: The ICRF44 antibody inhibits heterotypic adhesion of granulocytes in response to fMLP. Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen tissue sections, immunofluorescence microscopy5, stimulation of monocytes3, blocking of heterotypic PMN aggregation[8], and blocking of granulocyte activation[12]. This clone was tested in-house and does not work on formalin fixed paraffin-embedded (FFPE) tissue.

The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 301312).

Sony Biotechnology Inc. 1730 North First Street, San Jose, CA 95112 www.sonybiotechnology.com

Application References:

1. Knapp W. 1989. Leucocyte Typing IV. Oxford University Press New York.
2. Barclay N, *et al.* 1997. The Leucocyte Antigen Facts Book. Academic Press Inc. San Diego.
3. Rezzonico R, *et al.* 2001. *Blood* 97:2932. (Stim)
4. Marsik C, *et al.* 2003. *Shock* 20:493. (FC)
5. David A, *et al.* 2003. *J. Leukoc. Biol.* 74:551. (IF)
6. Charles N, *et al.* 2010. *Nat. Med.* 16:701. (FC) PubMed
7. Thurlow LR, *et al.* 2010. *Infect. Immun.* 128:1128. (FC) PubMed
8. Jadhav S, *et al.* 2001. *J. Immunol.* 167:5986. (Block)
9. Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)
10. Sestak K, *et al.* 2007. *Vet. Immunol. Immunopathol.* 119:21. (FC)
11. Wen T, *et al.* 2014. *J Immunol.* 192:5481. (FC) PubMed
12. Sprong T, *et al.* 2003. *Blood* 102:3702. (Block)
13. Cash JL, *et al.* 2013. *EMBO Rep.* 14:999. (FC) PubMed
14. Larsson K, *et al.* 2015. *PNAS.* PubMed

Description: CD11b is a 165-170 kD type I transmembrane glycoprotein also known as α_M integrin, Mac-1, CR3, and C3biR. CD11b non-covalently associates with integrin β_2 (CD18) and is expressed on granulocytes, monocytes/macrophages, dendritic cells, NK cells, and subsets of T and B cells. CD11b/CD18 is critical for the transendothelial migration of monocytes and neutrophils. It is also involved in granulocyte adhesion, phagocytosis, and neutrophil activation. CD11b/CD18 interacts with ICAM-1 (CD54), ICAM-2 (CD102), ICAM-4, CD14, CD23, heparin, iC3b, fibrinogen, and factor X.

Antigen References:

1. Stewart M, *et al.* 1995. *Curr. Opin. Cell Biol.* 7:690.