Product Data Sheet

Brilliant Violet 605[™] anti-human CD11c

Catalog # / Size:	2108175 / 25 tests 2108180 / 100 tests	à 🛔
Clone:	3.9	- 八 []
Isotype:	Mouse IgG1, к	Belative Coll Number
Reactivity:	Human	
Preparation:	The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 605 [™] under optimal conditions. The solution is free of unconjugated Brilliant Violet 605 [™] and unconjugated antibody.	
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).	Log Fluorescence Intensity Human peripheral blood granulocytes were stained with
Workshop Number:	III NL707	CD11c (clone 3.9) Brilliant Violet 605™ (filled histogram) or mouse
Concentration:	Lot-specific	IgG1, κ Brilliant Violet 605 [™] isotype control (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 605[™] excites at 405 nm and emits at 603 nm. The bandpass filter 610/20 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 605[™] is a trademark of Sirigen Group Ltd.

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Application
 Notes:
 Clone 3.9 preferentially binds the activated form of CD11c, is specific for the I domain of CD11c, and is able to partially block the binding of CD11c and ICAM-4.
 3.9 binding is divalent cation dependent¹². While analyzing blood, it is best to use heparin as the anti-coagulant and not EDTA. Since the ability of clone 3.9 to bind to its target is divalent cation dependent, the usage of EDTA as an anti-coagulant may be detrimental to staining due to its chelating properties.

Additional reported applications (for the relevant formats) include: immunohistochemical staining of acetone-fixed frozen tissue sections4, and functional assays^{5,6}. The LEAF[™] purified antibody (Endotoxin <0.1 EU/µg, Azide-

	Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 301616). For highly sensitive assays, we recommend Ultra-LEAF ^{M} purified antibody (Cat. No. 301632) with a lower endotoxin limit than standard LEAF ^{M} purified antibodies (Endotoxin <0.01 EU/microg).
Application References:	 Schlossman S, <i>et al.</i> Eds. 1995. Leucocyte Typing V. Oxford University Press. New York. Knapp W, <i>et al.</i> 1989. Leucocyte Typing IV Oxford University Press. New York. McMichael A, <i>et al.</i> Eds. 1987. Leucocyte Typing III Oxford University Press. New York. Vainer B, <i>et al.</i> 2000. <i>Am. J. Surg. Pathol.</i> 24:1115. (IHC) Ottonello L, <i>et al.</i> 1999. <i>Blood</i> 93:3505. Metelitsa LS, <i>et al.</i> 2002. <i>Blood</i> 99:4166. Sadhu C, <i>et al.</i> 2007. <i>J. Leukoc. Biol.</i> doi:10.1189/jlb.1106680. <u>PubMed</u> Ihanus E, <i>et al.</i> 2008. <i>Blood</i> 112:1231. <u>PubMed</u> Asai A, <i>et al.</i> 2009. <i>J. Lipid Res.</i> 50:95. <u>PubMed</u> Yoshino N, <i>et al.</i> 2000. <i>Exp. Anim. (Tokyo)</i> 49:97. (FC) Sadhu C, <i>et al.</i> 2008. <i>J. Immunoass. Immunoch.</i> 29:42. (FC)
Description:	CD11c is a 145-150 kD type I transmembrane glycoprotein also known as integrin α_X and CR4. CD11c non-covalently associates with integrin β 2 (CD18) and is expressed on monocytes/macrophages, dendritic cells, granulocytes, NK cells, and subsets of T and B cells. CD11c has been reported to play a role in adhesion and CTL killing through its interactions with fibrinogen, CD54, and iC3b.
Antigen References:	1. Petty H. 1996. <i>Immunol. Today</i> 17:209. 2. Springer T. 1994. <i>Cell</i> 76:301. 3. Ihanus E, <i>et al.</i> 2007. <i>Blood</i> 109:802-810.