Brilliant Violet 605™ anti-human CD33 Antibody

Catalog# / Size	303453 / 25 tests 303454 / 100 tests
Clone	WM53
Regulatory Status	RUO
Workshop	IV M-505
Other Names	Siglec-3, gp67, p67
Isotype	Mouse IgG1, κ
Description	CD33 is a 67 kD type I transmembrane glycoprotein also known as Siglec-3, gp67, and p67. It is a sialoadhesion immunoglobulin superfamily member expressed on myeloid progenitors, monocytes, granulocytes, dendritic cells and mast cells. CD33 is absent on normal platelets, lymphocytes, erythrocytes and hematopoietic stem cells. CD33 functions as a sialic acid-dependent cell adhesion molecule with carbohydrate/lectin binding activity.

Product Details

Verified Reactivity	Human
Reported Reactivity	Chimpanzee
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Human myeloid leukaemia cells.
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 605™ under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration and expiration, please enter the lot number in our Certificate of Analysis online tool.)
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. **Do not freeze**.
Application	FC - Quality tested
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 µL per million cells in 100 µL staining volume or 5 µL per 100 µL 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. Learn more about Brilliant Violet™. 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.

Excitation Laser	Violet Laser (405 nm)
Application Notes	Additional reported applications (for the relevant formats) include: immunoprecipitation, Western blotting[3], induction of cytokine production[3], and immunofluorescence[4]. The Ultra-LEAF™ purified antibody (Endotoxin < 0.01 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. Nos. 303437 & 303438).
Application References **(PubMed link indicates BioLegend citation)**	1. Knapp W, *et al.* 1989. Leucocyte Typing IV. Oxford University Press. New York. 2. Favaloro E, *et al.* 1988. *Br. J. Haematol.* 69:163. 3. Garnache-Ottou F, *et al.* 2005. *Blood* 105:1256. (WB) 4. Pèrez-Oliva AB, *et al*. 2011. *Glycobiology*. 21:757. (epitope, FC, IF)
RRID	AB_3662212 (BioLegend Cat. No. 303453) AB_3662212 (BioLegend Cat. No. 303454)

Antigen Details

Structure	Ig superfamily, sialoadhesins, type I glycoprotein, 67 kD
Distribution	Myeloid progenitor, monocytes, granulocytes, dendritic cells, mast cells
Function	Adhesion and lectin activity
Ligand/Receptor	Sugar chains containing sialic acid
Cell Type	B cells, Dendritic cells, Granulocytes, Hematopoietic stem and progenitors, Mast cells, Monocytes, Neutrophils
Biology Area	Cell Biology, Immunology, Neuroinflammation, Neuroscience
Molecular Family	CD Molecules, Siglec Molecules
Antigen References	1. Favaloro E, *et al.* 1988. *Br. J. Haematol.* 69:163. 2. Freeman S, *et al.* 1995. *Blood* 85:2005.
Gene ID	945

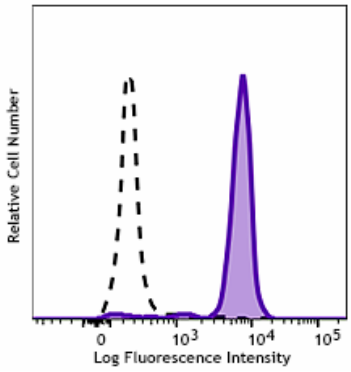
Related Protocols

- Cell Surface Flow Cytometry Staining Protocol

Other Formats

APC anti-human CD33, PE anti-human CD33, PE/Cyanine5 anti-human CD33, Purified anti-human CD33, PerCP/Cyanine5.5 anti-human CD33, Brilliant Violet 711™ anti-human CD33, Brilliant Violet 421™ anti-human CD33, Brilliant Violet 570™ anti-human CD33, Purified anti-human CD33 (Maxpar® Ready), Brilliant Violet 510™ anti-human CD33, Biotin anti-human CD33, Brilliant Violet 785™ anti-human CD33, Brilliant Violet 650™ anti-human CD33, PE/Cyanine7 anti-human CD33, PE/Dazzle™ 594 anti-human CD33, Alexa Fluor® 700 anti-human CD33, Ultra-LEAF™ Purified anti-human CD33, APC/Fire™ 750 anti-human CD33, APC/Cyanine7 anti-human CD33, GMP PerCP/Cyanine5.5 anti-human CD33, Alexa Fluor® 647 anti-human CD33, GMP APC anti-human CD33, GMP PE anti-human CD33, PE/Fire™ 810 anti-human CD33, Spark Blue™ 515 anti-human CD33, PE/Fire™ 700 anti-human CD33, GMP PE/Cyanine5 anti-human CD33, Spark Violet™ 423 anti-human CD33, Brilliant Violet 605™ anti-human CD33, PE/Fire™ 744 anti-human CD33 Antibody, Brilliant Violet 750™ anti-human CD33 Antibody

Product Data



Human peripheral blood monocytes were stained with anti-human CD33 (clone WM53) Brilliant Violet 605™ (filled histogram) or mouse IgG1, κ Brilliant Violet 605™ isotype control (open histogram).

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