

## Brilliant Violet 750™ anti-human CD33 Antibody

<b>Catalog# / Size</b>	303459 / 25 tests 303460 / 100 tests
<b>Clone</b>	WM53
<b>Regulatory Status</b>	RUO
<b>Workshop</b>	IV M-505
<b>Other Names</b>	Siglec-3, gp67, p67
<b>Isotype</b>	Mouse IgG1, κ
<b>Description</b>	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

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<b>Verified Reactivity</b>	Human
<b>Reported Reactivity</b>	Chimpanzee
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	Human myeloid leukaemia cells.
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 750™ under optimal conditions.
<b>Concentration</b>	Lot-specific (to obtain lot-specific concentration and expiration, please enter the lot number in our <a href="#">Certificate of Analysis</a> online tool.)
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>
<b>Application</b>	<a href="#">FC - Quality tested</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> . 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 750™ excites at 405 nm and emits at 750 nm. The bandpass filter 780/60 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 750™ is a trademark of Sirigen Group Ltd.

[Learn more about Brilliant Violet™.](#)

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<b>Excitation Laser</b>	Violet Laser (405 nm)
<b>Application Notes</b>	Additional reported applications (for the relevant formats) include: immunoprecipitation, Western blotting <sup>3</sup> , induction of cytokine production <sup>3</sup> , and immunofluorescence <sup>4</sup> . 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).
<b>Application References</b>	<ol style="list-style-type: none"> <li>1. Knapp W, <i>et al.</i> 1989. <i>Leucocyte Typing IV</i>. Oxford University Press. New York.</li> <li>2. Favalaro E, <i>et al.</i> 1988. <i>Br. J. Haematol.</i> 69:163.</li> <li>3. Garnache-Ottou F, <i>et al.</i> 2005. <i>Blood</i> 105:1256. (WB)</li> <li>4. Pèrez-Oliva AB, <i>et al.</i> 2011. <i>Glycobiology.</i> 21:757. (epitope, FC, IF)</li> </ol>
<b>(PubMed link indicates BioLegend citation)</b>	
<b>RRID</b>	AB_3698957 (BioLegend Cat. No. 303459) AB_3698957 (BioLegend Cat. No. 303460)

## Antigen Details

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<b>Structure</b>	Ig superfamily, sialoadhesins, type I glycoprotein, 67 kD
<b>Distribution</b>	Myeloid progenitor, monocytes, granulocytes, dendritic cells, mast cells
<b>Function</b>	Adhesion and lectin activity
<b>Ligand/Receptor</b>	Sugar chains containing sialic acid
<b>Cell Type</b>	B cells, Dendritic cells, Granulocytes, Hematopoietic stem and progenitors, Mast cells, Monocytes, Neutrophils
<b>Biology Area</b>	Cell Biology, Immunology, Neuroinflammation, Neuroscience
<b>Molecular Family</b>	CD Molecules, Siglec Molecules
<b>Antigen References</b>	<ol style="list-style-type: none"> <li>1. Favalaro E, <i>et al.</i> 1988. <i>Br. J. Haematol.</i> 69:163.</li> <li>2. Freeman S, <i>et al.</i> 1995. <i>Blood</i> 85:2005.</li> </ol>
<b>Gene ID</b>	<a href="#">945</a>

## Related Protocols

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- [Cell Surface Flow Cytometry Staining Protocol](#)

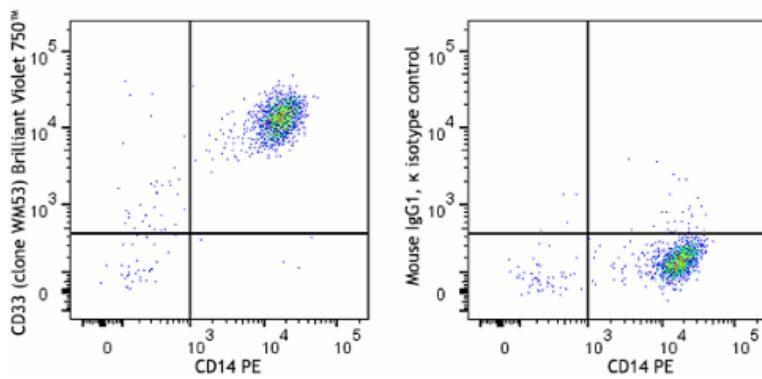
## Other Formats

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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

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Human peripheral blood monocytes were stained with anti-human CD14 (clone HCD14) PE and anti-human CD33 (clone WM53) Brilliant Violet 750™ (left) or mouse IgG1, κ Brilliant Violet 750™ isotype control (right).

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