

## PE/Fire™ 744 anti-human CD33 Antibody

<b>Catalog# / Size</b>	303455 / 25 tests 303456 / 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 PE/Fire™ 744 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>	<p>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.</p> <p>True-Stain Monocyte Blocker™ (Cat No. 426102) is recommended to minimize non-specific staining of PE/Fire™ 744 on monocytes and macrophages.</p> <p>* PE/Fire™ 744 has a maximum excitation of 565 nm and a maximum emission of 744 nm.</p>
<b>Excitation Laser</b>	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 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).

## 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. Pérez-Oliva AB, *et al.* 2011. *Glycobiology.* 21:757. (epitope, FC, IF)

RRID

AB\_3698956 (BioLegend Cat. No. 303455)  
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## Antigen Details

<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>	1. Favaloro E, <i>et al.</i> 1988. <i>Br. J. Haematol.</i> 69:163. 2. Freeman S, <i>et al.</i> 1995. <i>Blood</i> 85:2005.
<b>Gene ID</b>	<a href="#">945</a>

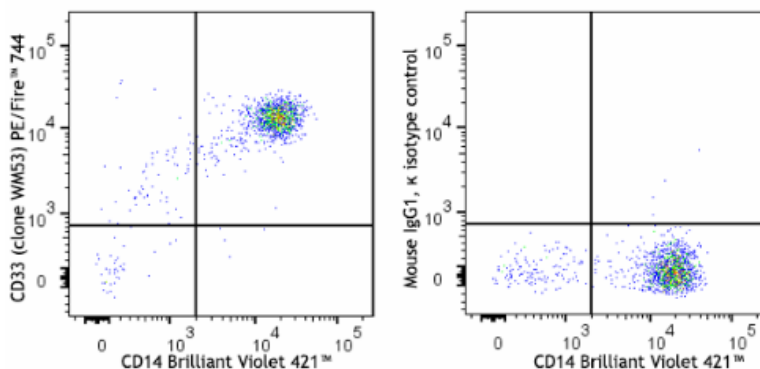
## Related Protocols

- [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 CD14 (clone HCD14) Brilliant Violet 421™ and anti-human CD33 (clone WM53) PE/Fire™ 744 (left) or mouse IgG1, κ PE/Fire™ 744 isotype control (right).

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