

## Alexa Fluor® 700 anti-human CD33 Antibody

<b>Catalog# / Size</b>	303435 / 25 tests 303436 / 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

<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 Alexa Fluor® 700 under optimal conditions.
<b>Concentration</b>	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our <a href="#">Concentration and Expiration Lookup</a> or <a href="#">Certificate of Analysis</a> online tools.)
<b>Storage &amp; Handling</b>	The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 700 under optimal conditions. The solution is free of unconjugated Alexa Fluor® 700.
<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.  * Alexa Fluor® 700 has a maximum emission of 719 nm when it is excited at 633 nm / 635 nm. Prior to using Alexa Fluor® 700 conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.  Alexa Fluor® and Pacific Blue™ are trademarks of Life Technologies Corporation.  <a href="#">View full statement regarding label licenses</a>
<b>Excitation Laser</b>	Red Laser (633 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>	1. Knapp W, <i>et al.</i> 1989. Leucocyte Typing IV. Oxford University Press. New York.
<b>(PubMed link indicates</b>	2. Favalaro E, <i>et al.</i> 1988. <i>Br. J. Haematol.</i> 69:163.

**BioLegend citation)** 3. Garnache-Ottou F, *et al.* 2005. *Blood* 105:1256. (WB)  
4. Pérez-Oliva AB, *et al.* 2011. *Glycobiology*. 21:757. (epitope, FC, IF)

**Product Citations** 1. Karantanos T, *et al.* 2022. *Sci Adv.* 8:eabl8952. [PubMed](#)

**RRID** AB\_2810437 (BioLegend Cat. No. 303435)  
AB\_2810438 (BioLegend Cat. No. 303436)

## 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](#)

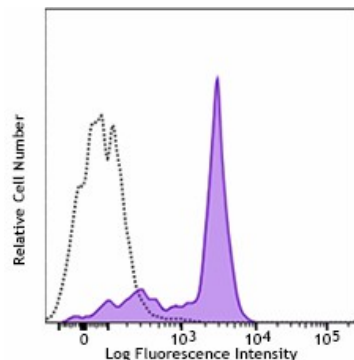
## Related Protocols

[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

## Product Data



Human peripheral blood monocytes were stained with human CD33 (clone WM53) Alexa Fluor® 700 (filled histogram) or mouse IgG1,κ Alexa Fluor® 700 isotype control (open histogram).

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