

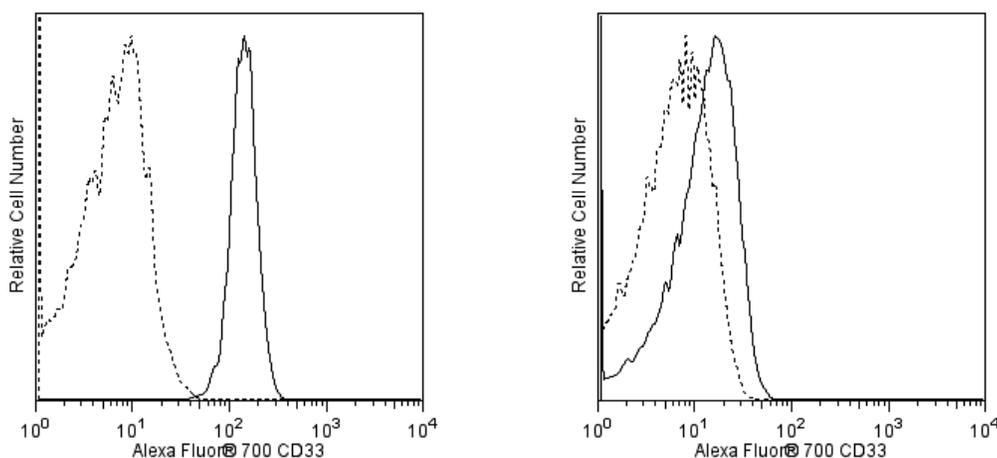
## Technical Data Sheet

**Alexa Fluor® 700 Mouse Anti-Human CD33****Product Information**

<b>Material Number:</b>	<b>561160</b>
<b>Alternate Name:</b>	Siglec-3; SIGLEC3; Sialic acid-binding Ig-like lectin 3; p67; gp67; My9
<b>Size:</b>	50 Tests
<b>Vol. per Test:</b>	5 µl
<b>Clone:</b>	WM53 (also known as WM-53)
<b>Immunogen:</b>	Acute Myeloid Leukemia Blasts
<b>Isotype:</b>	Mouse (BALB/c) IgG1, κ
<b>Reactivity:</b>	QC Testing: Human
<b>Workshop:</b>	IV M505
<b>Storage Buffer:</b>	Aqueous buffered solution containing protein stabilizer and ≤0.09% sodium azide.

**Description**

The WM53 monoclonal antibody specifically recognizes CD33 which is also known as Sialic acid-binding Ig-like lectin 3 (Siglec-3) or gp67. CD33 is a 67 kDa type I transmembrane glycoprotein that is variably expressed on myeloid progenitors, monocytes, macrophages, dendritic cells, neutrophils, basophils, mast cells, and on some activated T cells and NK cells. Normal lymphocytes, platelets, erythrocytes and pluripotent hematopoietic stem cells do not express the CD33 antigen. This glycoprotein reportedly functions as a sialic acid-dependent cell adhesion molecule and this function can be modulated by endogenous sialoglycoconjugates when CD33 is expressed on the membrane.



*Flow cytometric analysis of CD33 expression on human peripheral blood leukocytes. Whole blood was stained with FITC Mouse Anti-Human CD14 (Cat. No. 555397) and Alexa Fluor® 700 Mouse Anti-Human CD33 antibody (Cat. No. 561160; solid line histogram) or with a Alexa Fluor® 700 Mouse IgG1, κ Isotype Control (Cat. No. 557882; dashed line histogram). The erythrocytes were lysed with BD PharmLyse™ Lysing Buffer (Cat. No. 555899). The fluorescence histograms were derived from CD14-positive monocytes (Left Panel) or CD14-negative granulocytes (Right Panel) with the light scattering properties of viable cells. Flow cytometry was performed using a BD™ LSR II Flow Cytometer System.*

**Preparation and Storage**

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated to Alexa Fluor® 700 under optimum conditions, and unreacted Alexa Fluor® 700 was removed.

**Application Notes****Application**

Flow cytometry

Routinely Tested

**BD Biosciences**

bdbiosciences.com

United States 877.232.8995 Canada 866.979.9408 Europe 32.2.400.98.95 Japan 0120.8555.90 Asia Pacific 65.6861.0633 Latin America/Caribbean 55.11.5185.9995

For country contact information, visit [bdbiosciences.com/contact](http://bdbiosciences.com/contact)

*Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton, Dickinson and Company is strictly prohibited.*

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.  
© 2017 BD. BD, the BD Logo and all other trademarks are property of Becton, Dickinson and Company.

561160 Rev. 2



### Recommended Assay Procedure:

BD™ CompBeads can be used as surrogates to assess fluorescence spillover (Compensation). When fluorochrome conjugated antibodies are bound to CompBeads, they have spectral properties very similar to cells. However, for some fluorochromes there can be small differences in spectral emissions compared to cells, resulting in spillover values that differ when compared to biological controls. It is strongly recommended that when using a reagent for the first time, users compare the spillover on cell and CompBead to ensure that BD Comp beads are appropriate for your specific cellular application.

### Suggested Companion Products

Catalog Number	Name	Size	Clone
555397	FITC Mouse Anti-Human CD14	100 Tests	M5E2
557882	Alexa Fluor® 700 Mouse IgG1, κ Isotype Control	0.1 mg	MOPC-21
555899	Lysing Buffer	100 mL	(none)
554656	Stain Buffer (FBS)	500 mL	(none)
554657	Stain Buffer (BSA)	500 mL	(none)
349202	BD FACS™ Lysing Solution	100 mL	(none)

### Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use  $1 \times 10^6$  cells in a 100-μl experimental sample (a test).
2. An isotype control should be used at the same concentration as the antibody of interest.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. The Alexa Fluor®, Pacific Blue™, and Cascade Blue® dye antibody conjugates in this product are sold under license from Molecular Probes, Inc. for research use only, excluding use in combination with microarrays, or as analyte specific reagents. The Alexa Fluor® dyes (except for Alexa Fluor® 430), Pacific Blue™ dye, and Cascade Blue® dye are covered by pending and issued patents.
5. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at [www.bdbiosciences.com/colors](http://www.bdbiosciences.com/colors).
6. This product is provided under an intellectual property license between Life Technologies Corporation and BD Businesses. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The buyer cannot sell or otherwise transfer (a) this product (b) its components or (c) materials made using this product or its components to a third party or otherwise use this product or its components or materials made using this product or its components for Commercial Purposes. Commercial Purposes means any activity by a party for consideration and may include, but is not limited to: (1) use of the product or its components in manufacturing; (2) use of the product or its components to provide a service, information, or data; (3) use of the product or its components for therapeutic, diagnostic or prophylactic purposes; or (4) resale of the product or its components, whether or not such product or its components are resold for use in research. For information on purchasing a license to this product for any other use, contact Life Technologies Corporation, Cell Analysis Business Unit Business Development, 29851 Willow Creek Road, Eugene, OR 97402, USA, Tel: (541) 465-8300. Fax: (541) 335-0504.
7. Please refer to <http://regdocs.bd.com> to access safety data sheets (SDS).
8. Please refer to [www.bdbiosciences.com/us/s/resources](http://www.bdbiosciences.com/us/s/resources) for technical protocols.

### References

Favaloro EJ, Bradstock KF, Kabral A, Grimsley P, Zowtyj H, Zola H. Further characterization of human myeloid antigens (gp160,95; gp150; gp67): investigation of epitopic heterogeneity and non-haemopoietic distribution using panels of monoclonal antibodies belonging to CD- 11b, CD-13 and CD-33. *Br J Haematol*. 1988; 69(2):163-171. (Biology)

Favaloro EJ, Moraitis N, Koutts J, Exner T, Bradstock KF. Endothelial cells and normal circulating haemopoietic cells share a number of surface antigens. *Thromb Haemost*. 1989; 61(2):217-224. (Biology)

Freeman SD, Kelm S, Barber EK, Crocker PR. Characterization of CD33 as a new member of the sialoadhesin family of cellular interaction molecules. *Blood*. 1995; 85(8):2005-2012. (Biology)

Knapp W, W. Knapp .. et al., ed. *Leucocyte typing IV : white cell differentiation antigens*. Oxford New York: Oxford University Press; 1989:1-1182. (Clone-specific)

Nakamura Y, Noma M, Kidokoro M, et al. Expression of CD33 antigen on normal human activated T lymphocytes. *Blood*. 1994; 83(5):1442-3. (Biology)

van Vugt MJ, van den Herik-Oudijk IE, van de Winkle JG. Binding of PE-CY5 conjugates to the human high- affinity receptor for IgG (CD64). *Blood*. 1996; 88(6):2358-2361. (Biology)