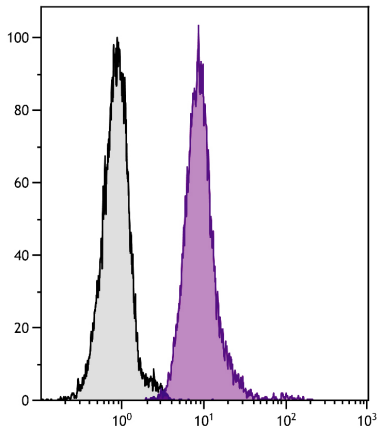
SouthernBiotech

Mouse Anti-Human CD33

Cat. No.	Format	Size
9590-01	Purified (UNLB)	0.1 mg
9590-02	Fluorescein (FITC)	100 tests
9590-02S	Fluorescein (FITC)	25 tests
9590-09	R-phycoerythrin (PE)	100 tests
9590-09S	R-phycoerythrin (PE)	25 tests
9590-11	Allophycocyanin (APC)	100 tests
9590-11S	Allophycocyanin (APC)	25 tests
9590-13	Spectral Red® (SPRD)	100 tests
9590-14	Low Endotoxin, Azide-Free (LE/AF)	0.5 mg
9590-16	R-phycoerythrin-Cyanine 5.5 (PE/CY5.5)	100 tests
9590-26	Pacific Blue™ (PACBLU)	100 tests
9590-27	Alexa Fluor® 700 (AF700)	100 tests
9590-30	Alexa Fluor® 488 (AF488)	100 tests
9590-31	Alexa Fluor® 647 (AF647)	100 tests



Human peripheral blood granulocytes were stained with Mouse Anti-Human CD33-PE/CY5.5 (SB Cat. No. 9590-16).

Overview

Clone	WM53
Isotype	Mouse $IgG_{1\kappa}$
Immunogen	Unknown
Specificity	Human CD33; Mr 67 kDa
Alternate Name(s)	gp67, p67, Siglec-3
Workshop	IV M505

Description

CD33 is a 67 kDa type I transmembrane glycoprotein and a member of the sialoadhesin family of cell surface receptors. It is absent from pluripotent stem cells but appears on myelomonocytic precursors after CD34. It then continues to be expressed on both the myeloid and monocyte lineages. While it has been reported that CD33 can function as a sialic acid-dependent cell adhesion molecule, cells expressing CD33 require desialylation before they can bind cells bearing the appropriate sialoglycoconjugates. This suggests that inhibitory cis interactions may regulate or block any adhesion function.

Applications

FC – Quality tested [1,2,4-6]
IHC-FS – Reported in literature [3]
ICC – Reported in literature [4]
IP – Reported in literature [1]
WB – Reported in literature [2]
Block – Reported in literature [1,5,6]

Working Dilutions

Flow Cytometry	Purified (UNLB) antibody	≤ 1 µg/10^6 cells
	FITC, PE, APC, SPRD, PE/CY5.5, PACBLU, AF488, AF647, and AF700 conjugates	10 µL/10^6 cells
	For flow cytometry, the suggested use of these reagents is in a final volume of 100 µL	
Other Applications	Since applications vary, you should determine the optimum working dilution for the product that is appropriate for your specific need.	

For Research Use Only. Not for Diagnostic or Therapeutic Use.

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Handling and Storage

- The purified (UNLB) antibody is supplied as 0.1 mg of purified immunoglobulin in 1.0 mL of borate buffered saline, pH 8.2. *No preservatives or amine-containing buffer salts added*. Store at 2-8°C.
- The fluorescein (FITC) conjugate is supplied as 25 tests in 0.25 mL or 100 tests in 1.0 mL of PBS/NaN_3. Store at 2-8°C.
- The R-phycoerythrin (PE) and allophycocyanin (APC) conjugates are supplied as 25 tests in 0.25 mL or 100 tests in 1.0 mL of PBS/NaN_3 and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The Spectral Red® (SPRD) and R-phycoerythrin-Cyanine 5.5 (PE/CY5.5) conjugates are supplied as 100 tests in 1.0 mL of PBS/NaN_3 and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The low endotoxin, azide-free (LE/AF) antibody is supplied as 0.5 mg purified immunoglobulin in 1.0 mL of PBS. Contains no preservative; handle under aseptic conditions. Store at 2-8°C or aliquot into smaller volumes and store at -20°C. Avoid multiple freeze / thaw cycles.
- The Pacific Blue™ (PACBLU), Alexa Fluor® 488 (AF488), Alexa Fluor® 647 (AF647), and Alexa Fluor® 700 (AF700) conjugates are supplied as 100 tests in 1.0 mL of PBS/NaN_3. Store at 2-8°C.
- Protect fluorochrome conjugated forms from light. Reagents are stable for the period shown on the label if stored as directed.

Warning

Some reagents contain sodium azide. Please refer to product specific SDS.

References

1. Hernández-Caselles T, Martínez-Esparza M, Pérez-Oliva AB, Quintanilla-Cecconi AM, García-Alonso A, Alvarez-Lopéz DM, et al. A study of CD33 (SIGLEC-3) antigen expression and function on activated human T and NK cells: two isoforms of CD33 are generated by alternative splicing. J Leukoc Biol. 2006;79:46-58. (IP, FC, Block)
2. Garnache-Ottou F, Chaperot L, Biichle S, Ferrand C, Remy-Martin J, Deconinck E, et al. Expression of the myeloid-associated marker CD33 is not an exclusive factor for leukemic plasmacytoid dendritic cells. Blood. 2005;105:1256-64. (WB, FC)
3. Lampinen M, Waddell A, Ahrens R, Carlson M, Hogan SP. $CD14^+CD33^+$ myeloid cell-CCL11-eosinophil signature in ulcerative colitis. J Leukoc Biol. 2013;94:1061-70. (IHC-FS)
4. Pérez-Oliva AB, Martínez-Esparza M, Vicente-Fernández JJ, Corral-San Miguel R, Garcia-Peñarrubia P, Hernández-Caselles T. Epitope mapping, expression and post-translational modifications of two isoforms of CD33 (CD33M and CD33m) on lymphoid and myeloid human cells. Glycobiology. 2011;21:757-70. (ICC, FC)
5. Vitale C, Romagnani C, Falco M, Ponte M, Vitale M, Moretta A, et al. Engagement of p75/AIRM1 or CD33 inhibits the proliferation of normal or leukemic myeloid cells. Proc Natl Acad Sci USA. 1999;96:15091-6. (FC, Block)
6. Vitale C, Romagnani C, Puccetti A, Olive D, Costello R, Chiossone L, et al. Surface expression and function of p75/AIRM-1 or CD33 in acute myeloid leukemias: engagement of CD33 induces apoptosis of leukemic cells. Proc Natl Acad Sci USA. 2001;98:5764-9. (FC, Block)

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