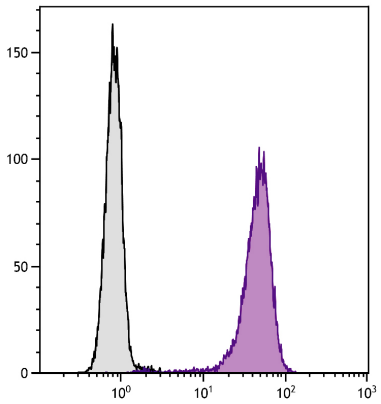
SouthernBiotech

Mouse Anti-Human CD16

Cat. No.	Format	Size
9570-01	Purified (UNLB)	0.1 mg
9570-02	Fluorescein (FITC)	100 tests
9570-08	Biotin (BIOT)	100 tests
9570-09	R-phycoerythrin (PE)	100 tests
9570-13	Spectral Red® (SPRD)	100 tests
9570-27	Alexa Fluor® 700 (AF700)	100 tests
9570-30	Alexa Fluor® 488 (AF488)	100 tests
9570-31	Alexa Fluor® 647 (AF647)	100 tests



Human peripheral blood granulocytes were stained with Mouse Anti-Human CD16-BIOT (SB Cat. No. 9570-08) followed by Streptavidin-FITC (SB Cat. No. 7100-02).

Overview

Clone	GRM1
Isotype	Mouse (BALB/c) $IgG_{2a}\kappa$
Immunogen	Mononuclear cells from a prolymphocytic B-leukemia
Specificity	Human CD16; Mr 50-65 kDa
Alternate Name(s)	FcγRIII, low affinity Fc receptor
Workshop	III 306; IV N408; V MA67

Description

CD16, a member of the immunoglobulin superfamily, is a 50-65 kDa glycoprotein found as both a transmembrane and GPI-linked form. The transmembrane form of CD16 is expressed on NK cells, granulocytes, macrophages, and mast cells but not on eosinophils. The GPI-anchored type of CD16 is found only on neutrophils. CD16 is involved in NK activation and signal transduction.

Applications

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

Working Dilutions

Flow Cytometry	Purified (UNLB) antibody	≤ 1 μg/10^6 cells
	FITC, BIOT, PE, SPRD, 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), 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.
- The biotin (BIOT) conjugate is supplied as 100 tests in 1.0 mL of PBS/NaN_3. Store at 2-8°C.
- The R-phycoerythrin (PE) conjugate is 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 Spectral Red® (SPRD) conjugate is supplied as 100 tests in 1.0 mL of PBS/NaN_3 and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- 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. Lopez-Nevot MA, Cabrera T, Huelin C, Ruiz-Cabello F, Garrido F. A study of mAb GRM1 which reacts with natural killer cells and granulocytes. In: McMichael AJ, Beverley PC, Cobbold S, Crumpton MJ, Gilks W, Gotch FM, et al, editors. Leukocyte Typing III: White Cell Differentiation Antigens. Oxford: Oxford University Press; 1987. p. 707. (Immunogen, IP, CMCD)
2. Uggla CK, Jondal M, Kaplan D, Flomenberg N, Knowles RW. Enhancement of natural killer cell activity by unique antibodies within the CD2 (sheep-RBC receptor) and CD16 (Fc receptor) clusters. In: McMichael AJ, Beverley PC, Cobbold S, Crumpton MJ, Gilks W, Gotch FM, et al, editors. Leukocyte Typing III: White Cell Differentiation Antigens. Oxford: Oxford University Press; 1987. p. 134-7. (IP)
3. Wainwright SD, Holmes CH. Distribution of Fcγ receptors on trophoblast during human placental development: an immunohistochemical and immunoblotting study. Immunology. 1993;80:343-51. (IHC-FS, WB)
4. Masuda M, Miyoshi H, Kobatake S, Nishimura N, Dong XH, Komiyama Y, et al. Increased soluble FcγRIIIa$^{M\phi}$ in plasma from patients with coronary artery diseases. Artherosclerosis. 2006;188:377-83. (ELISA)
5. Masuda M, Amano K, Hong SY, Nishimura N, Fukui M, Yoshika M, et al. Soluble FcγRIIIa$^{M\phi}$ levels in plasma correlate with carotid maximum intima-media thickness (IMT) in subjects undergoing an annual medical checkup. Mol Med. 2008;14:436-42. (ELISA)
6. Pilling D, Vakil V, Gomer RH. Improved serum-free culture conditions for the differentiation of human and murine fibrocytes. J Immunol Methods. 2009;351:62-70. (FC)

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