

# CD16 Monoclonal Antibody (eBioCB16 (CB16)), Super Bright™ 436, eBioscience™

Product Details	
Size	25 Tests
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), Super Bright™ 436, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	eBioCB16 (CB16)
Conjugate	Super Bright™ 436
Excitation/Emission Max	413/431 nm
Form	Liquid
Concentration	5 µL/Test
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2688189

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.06 µg)/test	16 Publications

## Product Specific Information

**Description:** The eBioCB16 monoclonal antibody recognizes CD16 (Fc gammaRIII), the low-affinity receptor for IgG with an apparent molecular weight of 50-80 kDa. CD16 is represented by two similar genes, CD16A (Fc gammaRIIIA), which exists as a hetero-oligomeric polypeptide-anchored form in macrophages and NK cells and CD16B (Fc gammaRIIIB), which exist as a monomeric GPI-anchored form in neutrophils. Furthermore, there are two known polymorphisms of CD16B, NA-1 and NA-2. Individuals homozygous for NA-2 show a lower phagocytic capacity compared with NA-1. CD16 binds IgG in the form of immune complexes and shows preferential binding of IgG1 and IgG3 isotypes and minimal binding of IgG2 and IgG4. Upon IgG binding, both CD16 isoforms initiate signal transduction cascades that lead to a variety of responses including antibody-dependent cell-mediated cytotoxicity (ADCC), phagocytosis, degranulation and proliferation.

**Applications Reported:** This 0168 antibody has been reported for use in flow cytometric analysis.

**Applications Tested:** This 0168 antibody has been pre-diluted and tested by flow cytometric analysis of normal human peripheral blood cells. This may be used at 5 µL (0.06 µg) per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test.

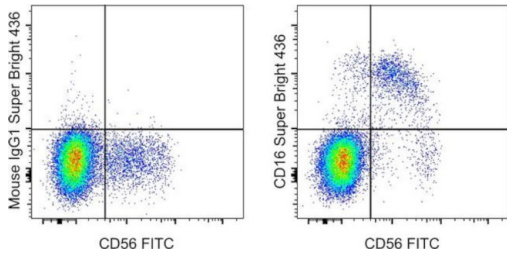
Super Bright 436 can be excited with the violet laser line (405 nm) and emits at 436 nm. We recommend using a 450/50 bandpass filter, or equivalent. Please make sure that your instrument is capable of detecting this fluorochrome.

When using two or more Super Bright dye-conjugated antibodies in a staining panel, it is recommended to use Super Bright Complete Staining Buffer (Product # SB-4401) to minimize any non-specific polymer interactions. Please refer to the datasheet for Super Bright Staining Buffer for more information.

Excitation: 405 nm; Emission: 436 nm; Laser: Violet Laser

Super Bright Polymer Dyes are sold under license from Becton, Dickinson and Company.

## Product Images For CD16 Monoclonal Antibody (eBioCB16 (CB16)), Super Bright™ 436, eBioscience™



### CD16 Antibody (62-0168-41) in Flow

Normal human peripheral blood cells were stained with CD56 Monoclonal Antibody, FITC (Product # 11-0566-42) and Mouse IgG1 kappa Isotype Control, Super Bright 436 (Product # 62-4714-82) (left) or CD16 Monoclonal Antibody, Super Bright 436 (right). Cells in the lymphocyte gate were used for analysis.

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## 16 References

### Flow Cytometry (16)

Journal of experimental & clinical cancer research : CR

#### NK cell-triggered CCL5/IFN-CXCL9/10 axis underlies the clinical efficacy of neoadjuvant anti-HER2 antibodies in breast cancer.

Year  
2024

"Published figure using CD16 monoclonal antibody (Product # 62-0168-42) in Flow Cytometry"

Authors: Santana-Hernández S, Suarez-Olmos J, Servitja S, Berenguer-Molins P, Costa-Garcia M, Comerma L, Rea A, Perera-Bel J, Menendez S, Arpi O, Bermejo B, Martínez MT, Cejalvo JM, Comino-Méndez I, Pascual J, Alba E, López-Botet M, Rojo F, Rovira A, Albanell J, Muntasell A

PeerJ

#### SARS-CoV-2 Delta (B.1.617.2) variant replicates and induces syncytia formation in human induced pluripotent stem cell-derived macrophages.

Year  
2023

"Published figure using CD16 monoclonal antibody (Product # 62-0168-42) in Flow Cytometry"

Authors: Thaweerattanasin T, Wanitchang A, Saenboonrueng J, Srisutthisamphan K, Wanasen N, Sungsuwan S, Jongkaewwattana A, Chailangkarn T

[View more Flow references on thermofisher.com](#)

## More applications with references on thermofisher.com

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