

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

| Product Details | |
|-----------------------------|--------------------------------------------------------------------------------|
| Size | 100 Tests |
| Species Reactivity | Human |
| 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 |
| Form | Liquid |
| Concentration | 5 µL/Test |
| Purification | Affinity chromatography |
| Storage buffer | PBS, pH 7.2, with BSA |
| Contains | 0.09% sodium azide |
| Storage conditions | 4° C, store in dark, DO NOT FREEZE! |
| RRID | AB_2688190 |

| Applications | Tested Dilution | Publications |
|-----------------------|---------------------|----------------|
| Flow Cytometry (Flow) | 5 µL (0.06 µg)/test | 4 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 10⁵ to 10⁸ 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.

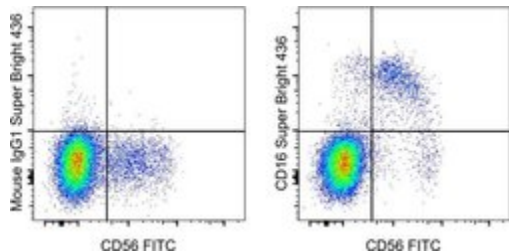
When using two or more Super Bright dye-conjugated antibodies in a staining panel, it is recommended to use Super Bright

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 (62-0168-42) 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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4 References

Flow Cytometry (4)

Journal of immunology research

Circulating Neutrophils of Nonalcoholic Steatohepatitis Patients Show an Activated Phenotype and Suppress T Lymphocytes Activity.

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

Authors: Antonucci L, Porcu C, Timperi E, Santini SJ, Iannucci G, Balsano C

Species
Not Applicable

Dilution
Not Cited

Year
2021

Arthritis research & therapy

CD14⁺CD16⁻ monocytes are the main precursors of osteoclasts in rheumatoid arthritis via expressing Tyro3TK.

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

Authors: Xue J, Xu L, Zhu H, Bai M, Li X, Zhao Z, Zhong H, Cheng G, Li X, Hu F, Su Y

Species
Not Applicable

Dilution
Not Cited

Year
2020

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

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