

CD16 Monoclonal Antibody (eBioCB16 (CB16)), Functional Grade, eBioscience™

Product Details	
Size	500 µg
Species Reactivity	Human
Published Species	Human, Mouse
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), Functional Grade, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	eBioCB16 (CB16)
Conjugate	Functional Grade
Form	Liquid
Concentration	1 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	no preservative
Storage conditions	4° C
RRID	AB_529495

Applications	Tested Dilution	Publications
Immunocytochemistry (ICC/IF)	-	2 Publications
Flow Cytometry (Flow)	0.5 µg/test	18 Publications
Functional Assay (FN)	Assay-Dependent	1 Publication
Control (Ctrl)	Assay-Dependent	-
T-Cell Activation (TCA)	-	1 Publication

Product Specific Information

Description: The eBioCB16 monoclonal antibody recognizes CD16 (FcγRIII), the low-affinity receptor for IgG with an apparent molecular weight of 50-80 kDa. CD16 is represented by two similar genes, CD16A (FcγRIIIA), which exists as a hetero-oligomeric polypeptide-anchored form in macrophages and NK cells and CD16B (FcγRIIIB), 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 eBioCB16 (CB16) antibody has been reported for use in flow cytometric analysis.

Applications Tested: This eBioCB16 (CB16) antibody has been tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at less than or equal to 0.5 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. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Storage and handling: Use in a sterile environment.

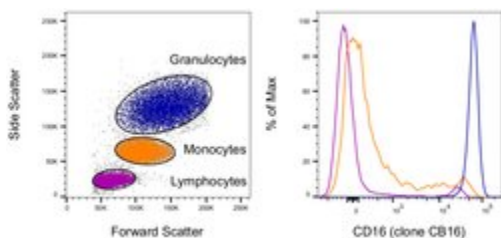
Filtration: 0.2 µm post-manufacturing filtered.

Purity: Greater than 90%, as determined by SDS-PAGE.

Endotoxin Level: Less than 0.001 ng/µg antibody, as determined by LAL assay.

Aggregation: Less than 10%, as determined by HPLC.

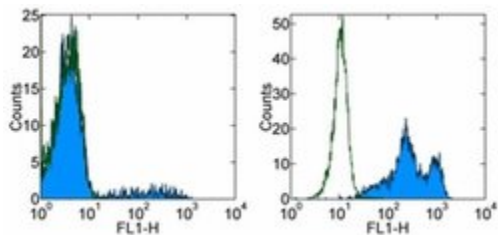
✓ Advanced Verification Data



CD16 Antibody (16-0168-85)

Staining of human peripheral blood cells. As expected based on known relative expression patterns, CD16 clone CB16 stains all granulocytes, a subset of monocytes and a subset of lymphocytes (NK cells). Details: Normal human whole blood was surface stained with CD16 (clone CB16). After staining, red blood cells were lysed using 1-step Fix/Lyse Buffer. Cells in the lymphocyte (purple histogram), monocyte (orange histogram), or granulocyte (blue histogram) gates were used for analysis. Relative expression validation info.

Product Images For CD16 Monoclonal Antibody (eBioCB16 (CB16)), Functional Grade, eBioscience™



CD16 Antibody (16-0168-85) in Flow

Staining of normal human peripheral blood cells with 0.25 µg of Mouse IgG1 kappa Isotype Control Purified (Product # 14-4714-82) (open histogram) or 0.25 µg of Anti-Human CD16 Purified (filled histogram) followed by Anti-Mouse IgG FITC (Product # 11-4011-85). Cells in the lymphocyte (left) and granulocyte (right) gates were used for analysis.

[View more figures on thermofisher.com](https://www.thermofisher.com)

22 References

Immunocytochemistry (2)

OncoTargets and therapy

A DNA vaccine encoding mutated HPV58 mE6E7-Fc-GPI fusion antigen and GM-CSF and B7.1.

"Published figure using CD16 monoclonal antibody (Product # 16-0168-85) in Immunofluorescence"

Authors: Wang H, Yu J, Li L

Species
Not Applicable

Dilution
Not Cited

Year
2015

Arthritis research & therapy

Decreased plasma levels of soluble CD18 link leukocyte infiltration with disease activity in spondyloarthritis.

"Published figure using CD16 monoclonal antibody (Product # 16-0168-85) in Immunofluorescence"

Authors: Kragstrup TW, Jalilian B, Hvid M, Kjærgaard A, Østgård R, Schiøttz-Christensen B, Jurik AG, Robinson WH, Vorup-Jensen T, Deleuran B

Species
Not Applicable

Dilution
Not Cited

Year
2014

Flow Cytometry (18)

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 # 16-0168-85) 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 # 16-0168-85) 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](#)

More applications with references on thermofisher.com

FN (1)

TCA (1)

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