

CD16 Monoclonal Antibody (eBioCB16 (CB16)), eFluor 450, eBioscience

Product Details	
Size	100 Tests
Species Reactivity	Human
Published Species	Human
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), eFluor 450, eBioscience
Class	Monoclonal
Type	Antibody
Clone	eBioCB16 (CB16)
Conjugate	eFluor® 450
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.1% gelatin, 0.2% BSA
Contains	0.09% sodium azide
Storage Conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_1272052

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.25 µg)/test	8 Publications
T-Cell Activation (TCA)	-	1 Publication
Immunocytochemistry (ICC/IF)	-	2 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 eBioCB16 (CB16) antibody has been reported for use in flow cytometric analysis.

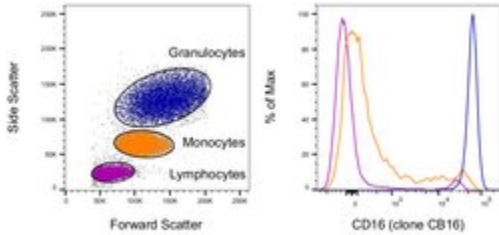
Applications Tested: This eBioCB16 (CB16) antibody has been pre-titrated and tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at 5 µL (0.25 µg) per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test.

eFluor® 450 is an alternative to Pacific Blue®. eFluor® 450 emits at 445 nm and is excited with the Violet laser (405 nm). Please make sure that your instrument is capable of detecting this fluorochrome.

Excitation: 405 nm; Emission: 445 nm; Laser: Violet Laser.

Filtration: 0.2 µm post-manufacturing filtered.

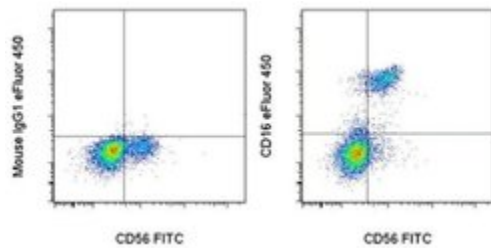
Advanced Verification Data



CD16 Antibody (48-0168-42)

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)), eFluor 450, eBioscience



CD16 Antibody (48-0168-42) in Flow

Staining of normal human peripheral blood cells with Anti-Human CD56 (NCAM) FITC (Product # 11-0569) and Mouse IgG1 K Isotype Control eFluor® 450 (Product # 48-4714-82) (left) or Anti-Human CD16 eFluor® 450 (right). Cells in the lymphocyte gate were used for analysis.

View more figures on thermofisher.com

11 References

Flow Cytometry (8)

Nature communications

Cellular metabolism constrains innate immune responses in early human ontogeny.

"48-0168 was used in Flow cytometry/Cell sorting to study the mechanisms underlying the profoundly attenuated pathogen immune responses in foetuses and premature infants."

Authors: Kan B,Michalski C,Fu H,Au HHT,Lee K,Marchant EA,Cheng MF,Anderson-Baucum E,Aharoni-Simon M,Tilley P,Mirmira RG,Ross CJ,Luciani DS,Jan E,Lavoie PM

Species
Human

Dilution
1:100

Year
2018

Atherosclerosis

Ex vivo culture of human atherosclerotic plaques: A model to study immune cells in atherogenesis.

"Published figure using CD16 monoclonal antibody (Product # 48-0168-42) in Flow Cytometry"

Authors: Lebedeva A,Vorobyeva D,Vagida M,Ivanova O,Felker E,Fitzgerald W,Danilova N,Gontarenko V,Shpektor A,Vasilieva E,Margolis L

Species
Not Applicable

Dilution
Not Cited

Year
2017

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

T-Cell Activation (1)

Nature communications

A child with perinatal HIV infection and long-term sustained virological control following antiretroviral treatment cessation.

"Published figure using CD16 monoclonal antibody (Product # 48-0168-42) in T-Cell Activation"

Authors: Violari A,Cotton MF,Kuhn L,Schramm DB,Paximadis M,Loubser S,Shalekoff S,Da Costa Dias B,Otjombe K,Liberty A,McIntyre J,Babiker A,Gibb D,Tiemessen CT

Species
Not Applicable

Dilution
Not Cited

Year
2019

Immunocytochemistry (2)

Arthritis research & therapy

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

"Published figure using CD16 monoclonal antibody (Product # 48-0168-42) 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

More applications with references on thermofisher.com

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