CD16 Monoclonal Antibody (eBioCB16 (CB16)), FITC, eBioscience™

Product Details	
Size	100 Tests
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), FITC, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	eBioCB16 (CB16)
Conjugate	FITC
Excitation/Emission Max	498/517 nm
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.2% BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_10805747

Applications	Tested Dilution	Publications
Immunocytochemistry (ICC/IF)	-	2 Publications
Flow Cytometry (Flow)	5 µL (0.125 µg)/test	42 Publications
T-Cell Activation (TCA)	-	1 Publication

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.

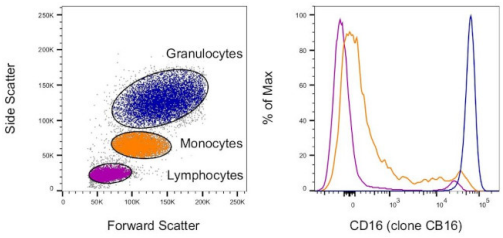
Applications Reported: This eBioCB16 (CB16) antibody has been reported for use in flow cytometric analysis.

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 (0.125 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 10^5 to 10^8 cells/test.

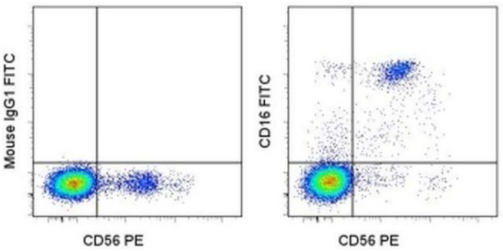
Excitation: 488 nm; Emission: 520 nm; Laser: Blue Laser.

Filtration: 0.2 µm post-manufacturing filtered.

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



CD16 Antibody (11-0168-42)
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. {RE}



CD16 Antibody (11-0168-42) in Flow
Staining of normal human peripheral blood cells with Anti-Human CD56 (NCAM) PE (Product # 12-0567-42) and Mouse IgG1 K Isotype Control FITC (Product # 11-4714-42) (left) or Anti-Human CD16 FITC (right). Cells in the lymphocyte gate were used for analysis.

View more figures on thermofisher.com

45 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 # 11-0168-42) in Immunofluorescence"

Authors: Wang H,Yu J,Li L

Year
2015

Species
Mouse

Dilution
1:100

Arthritis research & therapy

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

"Published figure using CD16 monoclonal antibody (Product # 11-0168-42) 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

Year
2014

Flow Cytometry (42)

PeerJ

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

"Published figure using CD16 monoclonal antibody (Product # 11-0168-42) in Flow Cytometry"

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

Year
2023

International journal of molecular medicine

Exhaustionlike dysfunction of T and NKT cells in an Xlinked severe combined immunodeficiency patient with maternal engraftment by singlecell analysis.

"11-0168-42 was used in Flow cytometry/Cell sorting to report an X-SCID patient with a de novo c.677C>T (p.R226H) variant in exon 5 of IL2RG, exhibiting recurrent and persistent infections from 3-months-old."

Authors: Dong W,Li W,Zhang S,Zeng X,Qin Q,Fan H,Tang Z,Wu X,Lu G

Year
2023

Species
Human

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More applications with references on thermofisher.com

TCA (1)

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