

CD16 Monoclonal Antibody (eBioCB16 (CB16)), APC-eFluor™ 780, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Published Species	Non-human primate, Human, Rhesus monkey
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), APC-eFluor™ 780, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	eBioCB16 (CB16)
Conjugate	APC-eFluor™ 780
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_11220086

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.25 µg)/test	23 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 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.

APC-eFluor 780 emits at 780 nm and is excited with the Red laser (633 nm). Please make sure that your instrument is capable of detecting this fluorochoime.

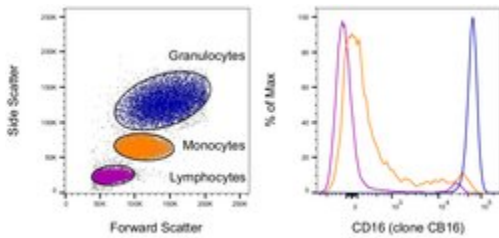
Light sensitivity: This tandem is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 μ L cell sample + 100 μ L IC Fixation Buffer) or 1-step Fix/Lyse Solution (cat. 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency/compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

Excitation: 633-647 nm; Emission: 780 nm; Laser: Red Laser.

Filtration: 0.2 μ m post-manufacturing filtered.

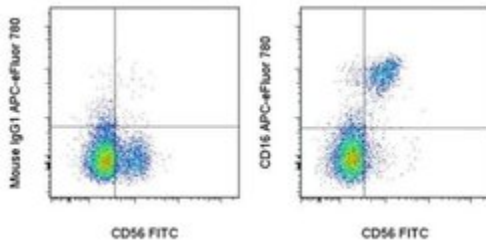
Advanced Verification Data



CD16 Antibody (47-0168-42)

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)), APC-eFluor™ 780, eBioscience™



CD16 Antibody (47-0168-42) in Flow

Staining of normal human peripheral blood cells with Anti-Human CD56 (NCAM) FITC (Product # 11-0569) and Mouse IgG1 K Isotype Control APC-eFluor® 780 (Product # 47-4714-82) (left) or Anti-Human CD16 APC-eFluor® 780 (right). Cells in the lymphocyte gate were used for analysis.

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Flow Cytometry (23)

Cellular and molecular gastroenterology and hepatology

Virus-Host Interactions Between Nonsecretors and Human Norovirus.

"47-0168 was used in Flow cytometry/Cell sorting to show that GII.2 infection results in broad antibody and cellular immunity activation that persisted for at least 30 days for T cells, monocytes, and dendritic cells, and for 180 days for blocking antibody."

Authors: Lindesmith LC, Brewer-Jensen PD, Mallory ML, Jensen K, Yount BL, Costantini V, Collins MH, Edwards CE, Sheahan TP, Vinjé J, Baric RS

Species
Human

Dilution
Not Cited

Year
2021

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 # 47-0168-42) in Flow Cytometry"

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

Species
Not Applicable

Dilution
Not Cited

Year
2021

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