CD16 Monoclonal Antibody (eBioCB16 (CB16)), Brilliant Ultra Violet™ 805, 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), Brilliant Ultra Violet™ 805, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	eBioCB16 (CB16)
Conjugate	Brilliant Ultra Violet™ 805
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!

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.125 µg)/test	-

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-diluted and tested by flow cytometric analysis of normal human peripheral blood cells. This may 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.

Brilliant Ultra Violet™ 805 (BUV805) is a tandem dye that emits at 797 nm and is intended for use on cytometers equipped with an ultraviolet (355 nm) laser. Please make sure that your instrument is capable of detecting this fluorochrome.

When using two or more Super Bright, Brilliant Violet™, Brilliant Ultra Violet™, or other polymer dye-conjugated antibodies in a staining panel, it is recommended to use Super Bright Complete Staining Buffer (Product # SB-4401) or Brilliant Stain Buffer

(Product # 00-4409-75) to minimize any non-specific polymer interactions. Please refer to the datasheet for Super Bright Staining Buffer or Brilliant Stain Buffer for more information.

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

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222) (100 µL of cell sample + 100 µL of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 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.

Our internal testing suggests that Brilliant Ultra Violet™ 805 (BUV805) is compatible with short-term methanol-based fixation, but should not be stored in buffers containing methanol for longer than one hour.

Excitation: 355 nm; Emission: 797 nm; Laser: Ultraviolet Laser.

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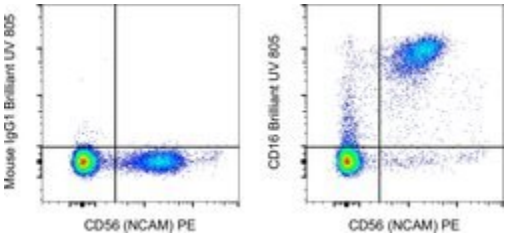
Product Images For CD16 Monoclonal Antibody (eBioCB16 (CB16)), Brilliant Ultra Violet™ 805, eBioscience™



CD16 Antibody (368-0168-42) in Flow
Normal human peripheral blood cells were stained with CD56 (NCAM) Monoclonal Antibody, PE (Product # 12-0567-42) and Mouse IgG1 kappa Isotype Control, Brilliant Ultra Violet 805 (BUV805) (Product # 368-4714-81) (left) or CD16 Monoclonal Antibody, Brilliant Ultra Violet 805 (BUV805) (right). Viable cells in the lymphocyte gate were used for analysis, as determined by 7-AAD (Product # 00-6993-50).