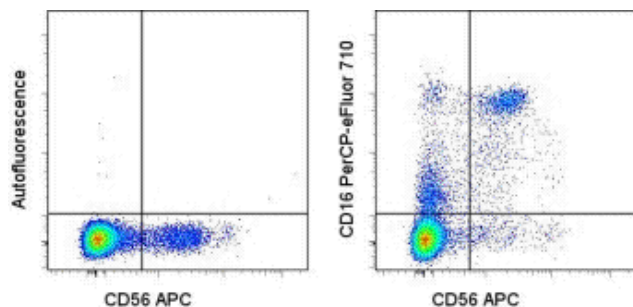


Anti-Human CD16 PerCP-eFluor® 710

Catalog Number: 46-0168

Also Known As: Low Affinity IgG Receptor 3, FCGR3a, FCGR3, IGFR10

RUO: For Research Use Only. Not for use in diagnostic procedures.



Staining of normal human peripheral blood cells with Anti-Human CD56 (NCAM) APC and staining buffer (autofluorescence) (left) or Anti-Human CD16 PerCP-eFluor® 710 (right). Cells in the lymphocyte gate were used for analysis.

Product Information

Contents: Anti-Human CD16 PerCP-eFluor® 710


REF **Catalog Number:** 46-0168

Clone: eBioCB16 (CB16)

Concentration: 5 µL (0.015 µg)/test

Host/Isotype: Mouse IgG1, kappa

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer

 **Temperature Limitation:** Store at 2-8°C. Do not freeze. Light sensitive material.

 **Batch Code:** Refer to Vial

 **Use By:** Refer to Vial

 **Contains sodium azide**

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 (0.015 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.

PerCP-eFluor® 710 can be used in place of PE-Cy5, PE-Cy5.5 or PerCP-Cy5.5. PerCP-eFluor® 710 emits at 710 nm and is excited with the blue laser (488 nm). Please make sure that your instrument is capable of detecting this fluorochrome. For a filter configuration, we recommend using the 685 LP dichroic mirror and 710/40 band pass filter, however the 695/40 band pass filter is an acceptable alternative.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 µL cell sample + 100 µL 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.

References

Deaglio S, Zubiaur M, Gregorini A, Bottarel F, Ausiello CM, Dianzani U, Sancho J, Malavasi F. Human CD38 and CD16 are functionally dependent and physically associated in natural killer cells. *Blood*. 2002 Apr 1;99(7):2490-8. (**CB16**, FC, PubMed)

Zilber MT, Gregory S, Mallone R, Deaglio S, Malavasi F, Charron D, Gelin C. CD38 expressed on human monocytes: a coaccessory molecule in the superantigen-induced proliferation. *Proc Natl Acad Sci U S A*. 2000 Mar 14;97(6):2840-5. (**CB16**, Cell Separation, PubMed)

Wirthmueller U, Kurosaki T, Murakami MS, Ravetch JV. Signal transduction by Fc gamma RIII (CD16) is mediated through the gamma chain. *J Exp Med*. 1992 May 1;175(5):1381-90.

Related Products

17-0569 Anti-Human CD56 (NCAM) APC (MEM188 (MEM-188))

46-4714 Mouse IgG1 K Isotype Control PerCP-eFluor® 710 (P3.6.2.8.1)

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