

Anti-Mouse CD21/CD35 PerCP-eFluor® 710

Catalog Number: 46-0212

Also known as: CR2/CR1, C3DR

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



Description

The monoclonal antibody eBio4E3 reacts with an eptiope shared by mouse CD21 (CR2) and CD35 (CR1). CD21 and CD35 are alternatively spliced transcripts from the Cr2 gene, which result in cell-surface proteins of 145 and 190 kDa, respectively. CD21 and CD35 are expressed by mature B cells, but not on thymocytes, peripheral T cells, erythrocytes or platelets. Furthermore, there is little evidence which demonstrates their expression on macrophages. CD21 is a receptor for complement component C3d and Epstein-Barr virus (EBV), and in association with CD19 and CD81, CD21 also participates in B-cell activation through the B cell receptor. Cr2 deficient mice display impaired inflammatory and humoral immune responses *in vivo*. The anti-mouse CD21/35 monoclonal antibody clones eBio4E3 and eBio8D9 do not cross-block each other suggesting that they bind to different epitopes.

Applications Reported

This eBio4E3 (4E3) antibody has been reported for use in flow cytometric analysis.

Applications Tested

This eBio4E3 (4E3) antibody has been tested by flow cytometric analysis of mouse splenocytes. This can be used at less than or equal to 0.25 μ g per test. A test is defined as the amount (μ g) of antibody that will stain a cell sample in a final volume of 100 μ L. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

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 uL cell sample + 100 uL 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.



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References

Kozono Y, Abe R, Kozono H, Kelly RG, Azuma T, and Holers VM. 1998. Cross-linking CD21/CD35 or CD19 increases both B7-1 and B7-2 expression on murine splenic B cells. Journal of Immunology. 160: 1565-1572. (8D9, FA, PubMed)

Martin, B.K., and J.H. Weis. 1993. Murine macrophages lack expression of the Cr2-145 (CR2) and Cr2-190 (CR1) gene products. *Eur. J. Immunol.* 23: 3037-3042.

Related Products

17-0452 Anti-Human/Mouse CD45R (B220) APC (RA3-6B2) 46-4321 Rat IgG2a K Isotype Control PerCP-eFluor® 710 (eBR2a)