

# CD21/CD35 Monoclonal Antibody (eBio4E3 (4E3)), PerCP-eFluor™ 710, eBioscience™

| Product Details             |  |
|-----------------------------|--|
| Size                        | 100 µg   |
| Species Reactivity          | Mouse  |
| Published Species           | Mouse  |
| Host/Isotype                | Rat / IgG2a, lambda  |
| Recommended Isotype Control | Rat IgG2a kappa Isotype Control (eBR2a), PerCP-eFluor™ 710, eBioscience™ |
| Class                       | Monoclonal   |
| Type                        | Antibody   |
| Clone                       | eBio4E3 (4E3)  |
| Conjugate                   | PerCP-eFluor™ 710  |
| Excitation/Emission Max     | 482/708 nm   |
| Form                        | Liquid   |
| Concentration               | 0.2 mg/mL  |
| Purification                | Affinity chromatography  |
| Storage buffer              | PBS, pH 7.2  |
| Contains                    | 0.09% sodium azide   |
| Storage conditions          | 4° C, store in dark, DO NOT FREEZE!                                      |
| RRID                        | AB_10855041  |

| Applications          | Tested Dilution | Publications   |
|-----------------------|-----------------|----------------|
| Flow Cytometry (Flow) | 0.25 µg/test    | 3 Publications |

## Product Specific Information

**Description:** The monoclonal antibody eBio4E3 reacts with an epitope 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 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<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

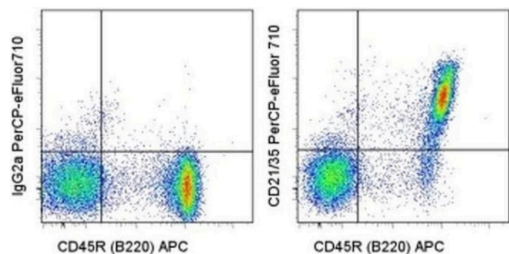
PerCP-eFluor® 710 emits at 710 nm and is excited with the blue laser (488 nm); it can be used in place of PerCP-Cyanine5.5. We recommend using a 710/50 bandpass filter, however, the 695/40 bandpass filter is an acceptable alternative. Please make sure that your instrument is capable of detecting this fluorochrome.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-822-49) (100 µL cell sample + 100 µL IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 00-5333-54) 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: 488 nm; Emission: 710 nm; Laser: Blue Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For CD21/CD35 Monoclonal Antibody (eBio4E3 (4E3)), PerCP-eFluor™ 710, eBioscience™



**CD21/CD35 Antibody (46-0212-82) in Flow**  
Staining of BALB/c splenocytes with Anti-Human/Mouse CD45R (B220) APC (Product # 17-0452-82) and 0.125 µg of Rat IgG2a K Isotype Control PerCP-eFluor® 710 (Product # 46-4321-82) (left) or 0.125 µg of Anti-Mouse CD21/CD35 PerCP-eFluor® 710 (right). Total viable cells were used for analysis.

3 References

Flow Cytometry (3)

|   |                  |
|---|------------------|
| Frontiers in immunology   | Year<br>2021     |
| <b>Estrogen Receptor Alpha Signaling Is Responsible for the Female Sex Bias in the Loss of Tolerance and Immune Cell Activation Induced by the Lupus Susceptibility Locus <i>Sle1b</i>.</b> |                  |
| "Published figure using CD21/CD35 monoclonal antibody (Product # 46-0212-82) in Flow Cytometry"   |                  |
| Authors: Graham JH,Yoachim SD,Gould KA  |                  |
| Cell reports  | Year<br>2020     |
| <b>Marginal Zone Formation Requires ACKR3 Expression on B Cells.</b>  | Species<br>Mouse |
| "46-0212-82 was used in Flow Cytometry to study the expression of atypical chemokine receptor 3 in marginal zone cells within the spleen."  |                  |
| Authors: Radice E,Ameti R,Melgrati S,Foglierini M,Antonello P,Stahl RAK,Thelen S,Jarrossay D,Thelen M   |                  |

[View more Flow references on thermofisher.cn](#)

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.