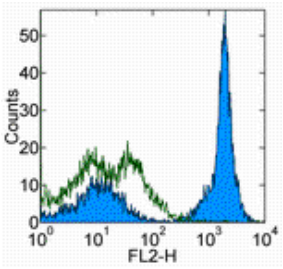
full spectrum cell analysis®
eBioscience®

Anti-Mouse CD19 Functional Grade Purified

Catalog Number: 16-0193

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



Staining of C57Bl/6 splenocytes with 0.25 ug of Rat IgG2a kappa Isotype Control Functional Grade Purified (cat. 16-4321) (open histogram) or 0.25 ug of Anti-Mouse CD19 Functional Grade Purified (filled histogram) followed by Anti-Rat IgG Biotin (cat. 13-4813) and Streptavidin PE (cat. 12-4317). Cells in the lymphocyte gate were used for analysis.

Product Information

Contents: Anti-Mouse CD19 Functional Grade Purified

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Clone: eBio1D3 (1D3)

Concentration: 1 mg/mL

Host/Isotype: Rat IgG2a, kappa

Handling Conditions: Use in sterile environment.

Endotoxin Level: Less than 0.001 ng/ug antibody, as determined by the LAL assay.

Formulation: aqueous buffer, no sodium azide

Temperature Limitation: Store at 2-8°C.

LOT **Batch Code:** Refer to Vial

Use By: Refer to Vial

Description

The eBio1D3 monoclonal antibody reacts with mouse CD19, a 95 kDa transmembrane glycoprotein. CD19 is expressed by B cells during all stages of development excluding the terminally differentiated plasma cells. Follicular dendritic cells also express CD19. Together CD21, CD81, MHC class II, and CD19 form a multimolecular complex that associates with the BCR. Signaling through CD19 induces tyrosine phosphorylation, calcium flux and proliferation of B cells.

Applications Reported

This eBio1D3 (1D3) antibody has been reported for use in flow cytometric analysis, and immunohistology staining of frozen tissue sections. The eBio1D3 monoclonal antibody has also been reported to induce down-regulation of CD19, affecting the proportions of B-1a and B-2 B cells in mice.

Applications Tested

This eBio1D3 (1D3) antibody has been tested by flow cytometric analysis of mouse splenocyte suspensions. This can be used at less than or equal to 0.5 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. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

Cherukuri A, Cheng PC, Pierce SK. The role of the CD19/CD21 complex in B cell processing and presentation of complement-tagged antigens. J Immunol. 2001 Jul 1;167(1):163-72.

Inabe K, Kurosaki T. Tyrosine phosphorylation of B-cell adaptor for phosphoinositide 3-kinase is required for Akt activation in response to CD19 engagement. Blood. 2002 Jan 15;99(2):584-9.

Krop I, de Fougerolles AR, Hardy RR, Allison M, Schlissel MS, Fearon DT. Self-renewal of B-1 lymphocytes is dependent on CD19. Eur J Immunol. 1996 Jan;26(1):238-42. (**1D3**, FA, PubMed)

Shoham T, Rajapaksa R, Boucheix C, Rubinstein E, Poe JC, Tedder TF, Levy S. The tetraspanin CD81 regulates the expression of CD19 during B cell development in a postendoplasmic reticulum compartment. J Immunol. 2003 Oct 15;171(8):4062-72.

Krop I, Shaffer AL, Fearon DT, Schlissel MS. The signaling activity of murine CD19 is regulated during cell development. J Immunol. 1996 Jul 1;157(1):48-56. (**1D3**, FC, FA, PubMed)

Related Products

11-0191 Anti-Mouse CD19 FITC (MB19-1)
12-0191 Anti-Mouse CD19 PE (MB19-1)
12-4317 Streptavidin PE
13-0191 Anti-Mouse CD19 Biotin (MB19-1)
13-4813 Anti-Rat IgG Biotin (Polyclonal)
14-0191 Anti-Mouse CD19 Purified (MB19-1)
16-0191 Anti-Mouse CD19 Functional Grade Purified (MB19-1)
16-4321 Rat IgG2a K Isotype Control Functional Grade Purified (eBR2a)
17-0191 Anti-Mouse CD19 APC (MB19-1)
36-0191 Anti-Mouse CD19 Functional Grade Biotin (MB19-1)

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