

Anti-Mouse CD3e Functional Grade Purified

Catalog Number: 16-0033 Also Known As:CD3 epsilon RUO: For Research Use Only. Not for use in diagnostic procedures.



Product Information

Staining of BALB/c splenocytes with Anti-Mouse CD19 APC (cat. 17-0193) and 0.25 ug of Golden Syrian hamster IgG Isotype Control Functional Grade Purified (cat. 16-4914) (left) or 0.25 ug of Anti-Mouse CD3e Functional Grade Purified (right) followed by Anti-Syrian Hamster IgG FITC (cat. 11-4211). Cells in the lymphocyte gate were used for analysis.



Description

The eBio500A2 monoclonal antibody reacts with the 25 kD epsilon subunit of the mouse CD3 complex. CD3 subunits γ , δ and ϵ are required for proper assembly, trafficking and surface expression of the TCR complex. CD3 is expressed by thymocytes in a developmentally regulated manner and by all mature T cells, as well as NKT cells. Binding of eBio500A2 to CD3 initiates the intracellular biochemical pathway resulting in cellular activation and proliferation. The 500A2 antibody is able to partially cross-block the 17A2 and 145-2C11 antibodies, indicating that all three of these anti-CD3 antibodies recognize distinct but overlapping epitopes.

Applications Tested

This eBio500A2 (500A2) antibody has been tested by flow cytometric analysis of mouse thymocyte and splenocyte suspensions. This can be used at less than or equal to 0.5 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.

References

Havran WL, Poenie M, Kimura J, Tsien R, Weiss A, Allison JP. Expression and function of the CD3-antigen receptor on murine CD4+8+ thymocytes. Nature. 1987 Nov 12-18;330(6144):170-3. (**500A2**, FC, FA, PubMed)

Portoles P, Rojo J, Golby A, Bonneville M, Gromkowski S, Greenbaum L, Janeway CA Jr, Murphy DB, Bottomly K. Monoclonal antibodies to murine CD3 epsilon define distinct epitopes, one of which may interact with CD4 during T cell activation. J Immunol. 1989 Jun 15;142(12):4169-75. (PubMed)

Ortaldo JR, Winkler-Pickett R, Mason AT, Mason LH. The Ly-49 family: regulation of cytotoxicity and cytokine production in murine CD3+ cells. J Immunol. 1998 Feb 1;160(3):1158-65. (**500A2**, FC, PubMed)

Related Products

11-4211 Anti-Golden Syrian Hamster IgG FITC (Polyclonal)
11-4317 Streptavidin FITC
12-4317 Streptavidin PE
13-4213 Anti-Golden Syrian Hamster IgG Biotin (Polyclonal)
16-0031 Anti-Mouse CD3e Functional Grade Purified (145-2C11)

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