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Anti-Mouse FR4 Functional Grade Purified

Catalog Number: 16-5446
Also Known As: Folate receptor 4, FOLR4 FRdelta, FRd
RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information

Contents: Anti-Mouse FR4 Functional Grade Purified
REF **Catalog Number:** 16-5446
Clone: eBioTH6
Concentration: 1 mg/mL
Host/Isotype: Rat IgG2b, 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 monoclonal antibody eBioTh6 recognizes FR4, also known as FR δ and FBP3 (folate binding protein3). FR4 is a heavily glycosylated 35 kD receptor for folic acid and the physiologic circulating form of the vitamin, N5-methyltetrahydrofolate. Natural T regs have high levels of FR4 and together with CD25 can be used to distinguish natural Tregs, effector T cells, memory-like T cells and naïve T cells. In vivo studies with eBioTH6 show a decrease in the number of CD4+CD25+ cells and an enhanced tumor response leading to the elimination of advanced stages of tumors.

Based on co-staining studies, the epitopes recognized by eBioTH6 and eBio12A5 (cat 51-5445) are different thereby allowing functional studies with TH6 to be evaluated with eBio12A5.

Applications Reported

This eBioTH6 antibody has been reported for use in flow cytometric analysis, immunoprecipitation and in vivo depletion.

Applications Tested

This eBioTH6 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 10^5 to 10^8 cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

Elnakat H, Ratnam M. Distribution, functionality and gene regulation of folate receptor isoforms: implications in targeted therapy. Adv Drug Deliv Rev. 2004 Apr 29;56(8):1067-84.

Spiegelstein O, Eudy JD, Finnell RH. Identification of two putative novel folate receptor genes in humans and mouse. Gene. 2000 Nov 27;258(1-2):117-25.

Sugimoto N, Oida T, Hirota K, Nakamura K, Nomura T, Uchiyama T, Sakaguchi S. Foxp3-dependent and -independent molecules specific for CD25+CD4+ natural regulatory T cells revealed by DNA microarray analysis. Int Immunol. 2006 Aug;18(8):1197-209.

Yamaguchi T, Hirota K, Nagahama K, Ohkawa K, Takahashi T, Nomura T, Sakaguchi S. Control of immune response by antigen-specific regulatory T cells expressing the folate receptor. Immunity 2007 July Epub (eBioTH6, FC, IP and FA).

Related Products

11-4317 Streptavidin FITC
11-4811 Anti-Rat IgG FITC
12-4317 Streptavidin PE
13-4813 Anti-Rat IgG Biotin (Polyclonal)
16-4031 Rat IgG2b K Isotype Control Functional Grade Purified
17-4317 Streptavidin APC

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