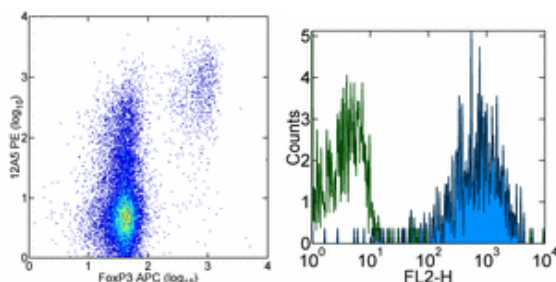


Anti-Mouse FR4 PE

Catalog Number: 12-5445

Also Known As: Folate receptor 4, FOLR4, FRdelta, FRd

RUO: For Research Use Only



Left: Staining of BALB/c splenocytes with 0.25 µg of Anti-Mouse FR4 PE (surface) and Anti-Mouse/Rat Foxp3 APC (cat. 17-5773) using the Foxp3 Staining Buffer Set (cat. 00-5523) (intracellular).

Right: Staining of CD4⁺CD25⁺ cells with Rat IgG1 κ Isotype Control PE (cat. 12-4301) (open histogram) or Anti-Mouse FR4 PE (filled histogram).

Product Information

Contents: Anti-Mouse FR4 PE

REF Catalog Number: 12-5445

Clone: eBio12A5

Concentration: 0.2 mg/mL

Host/Isotype: Rat IgG2b, κ

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer



Temperature Limitation: Store at 2-8°C. Do not freeze. Light sensitive material.



Batch Code: Refer to Vial



Use By: Refer to Vial

Description

The monoclonal antibody eBio12A5 recognizes FR4, also known as Folate receptor 4, 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. FR4^{hi} CD25^{hi} cells are natural Tregs with high levels of Foxp3. FR4^{hi} CD25^{lo} cells are identified as central memory T cells which upon stimulation can proliferate and produce large amounts of IL-2. In contrast FR4^{lo} CD25^{hi} secrete proinflammatory cytokines such as IFNγ and IL-17 and have been characterized as effector memory T cells.

Based on co-staining studies, the epitopes recognized by eBioTH6 (cat 51-5446) and eBio12A5 are different thereby allowing functional studies with eBioTH6 to be evaluated with eBio12A5.

Applications Reported

This eBio12A5 antibody has been reported for use in flow cytometric analysis.

Applications Tested

This eBio12A5 antibody has been tested by flow cytometric analysis of mouse splenocytes. 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 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

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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 responses by antigen-specific regulatory T cells expressing the folate receptor. *Immunity.* 2007 Jul;27(1):145-59. (eBio12A5, FC, IP, PubMed))

Related Products

00-5523 Foxp3 Staining Buffer Set
11-0041 Anti-Mouse CD4 FITC (GK1.5)
12-4031 Rat IgG2b K Isotype Control PE
17-5773 Anti-Mouse/Rat Foxp3 APC (FJK-16s)
25-0251 Anti-Mouse CD25 PE-Cy7 (PC61.5)

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