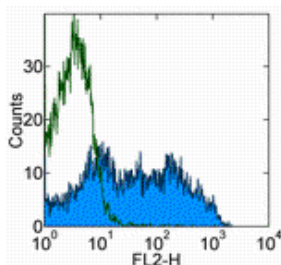


Anti-Rat CD3 Purified

Catalog Number: 14-0030

Also Known As: T3

RUO: For Research Use Only



Staining of rat splenocytes with 0.25 ug of Mouse IgG3 Isotype Control Purified (cat. 14-4742) (open histogram) or 0.25 ug of Anti-Rat CD3 Purified (filled histogram) followed by Anti-Mouse IgG Biotin (cat. 13-4013) and Streptavidin PE (cat. 12-4317). Cells in the lymphocyte gate were used for analysis.

Product Information

Contents: Anti-Rat CD3 Purified

REF **Catalog Number:** 14-0030

Clone: eBioG4.18 (G4.18)

Concentration: 0.5 mg/mL

Host/Isotype: Mouse IgG3, kappa

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



Temperature Limitation: Store at 2-8°C.



Batch Code: Refer to Vial



Use By: Refer to Vial



Caution, contains Azide

Description

The eBioG4.18 monoclonal antibody recognizes the rat CD3 protein. CD3 is a critical component of the T-cell receptor (TCR) and is a marker of the T-cell lineage. CD3 is a complex of several subunits and, upon binding of a TCR ligand, participates in transduction of signals from the TCR to the nucleus which results in a variety of cellular responses including transcription of IL-2 and clonal expansion. *in vitro*, immobilized G4.18 monoclonal antibody has been demonstrated to activate T cells, while soluble G4.18 inhibited allogeneic mixed-lymphocyte proliferative responses and cell-mediated cytotoxicity to allogeneic target cells. *in vivo*, G4.18 was demonstrated to induce long-term specific tolerance to an organ allograft.

Applications Reported

This eBioG4.18 (G4.18) antibody has been reported for use in flow cytometric analysis, immunoprecipitation, immunoblotting (WB), and immunohistochemical staining.

Applications Tested

This eBioG4.18 (G4.18) antibody has been tested by flow cytometric analysis of rat 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

Tran GT, Carter N, He XY, Spicer TS, Plain KM, Nicolls M, Hall BM, Hodgkinson SJ. Reversal of experimental allergic encephalomyelitis with non-mitogenic, non-depleting anti-CD3 mAb therapy with a preferential effect on T(h)1 cells that is augmented by IL-4. *Int Immunol*. 2001 Sep;13(9):1109-20. (**G4.18**, FC, FA, PubMed)

Brenan M, Rees DJ. Sequence analysis of rat integrin alphaE1 and alphaE2 subunits: tissue expression reveals phenotypic similarities between intraepithelial lymphocytes and dendritic cells in lymph. *Eur J Immunol*. 2000 Jun;30(6):1527-37.

Upham JW, Strickland DH, Bilyk N, Robinson BW, Holt PG. Alveolar macrophages from humans and rodents selectively inhibit T-cell proliferation but permit T-cell activation and cytokine secretion. *Immunology*. 1995 Jan;84(1):142-7.

Nicolls MR, Aversa GG, Pearce NW, Spinelli A, Berger MF, Gurley KE, Hall BM. Induction of long-term specific tolerance to allografts in rats by therapy with an anti-CD3-like monoclonal antibody. *Transplantation*. 1993 Mar;55(3):459-68. (**G4.18**, FC, IP, FA, PubMed)

Related Products

13-4013 Anti-Mouse IgG Biotin (Polyclonal)

14-4742 Mouse IgG3 Isotype Control Purified
17-4317 Streptavidin APC

Not for further distribution without written consent.

Copyright © 2000-2010 eBioscience, Inc.

Tel: 888.999.1371 or 858.642.2058 • Fax: 858.642.2046 • www.eBioscience.com • info@eBioscience.com