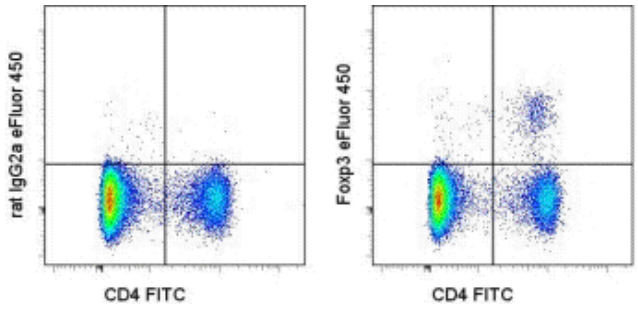
full spectrum cell analysis®
eBioscience®

Anti-Mouse/Rat Foxp3 eFluor® 450

Catalog Number: 48-5773
Also Known As: Forkhead Box P3, Scurfin, JM2, Treg
RUO: For Research Use Only. Not for use in diagnostic procedures.



Surface staining of C57BL/6 splenocytes with Anti-Mouse CD4 FITC (cat. 11-0041) followed by fixation and permeabilization with the Foxp3 Staining Buffers (cat. 00-5523) and intracellular staining with 0.03 ug of Rat IgG2a kappa Isotype Control eFluor® 450 (cat. 48-4321) (left) or 0.03 ug of Anti-Mouse/Rat Foxp3 eFluor® 450 (right). Cells in the lymphocyte gate were used for analysis.

Product Information

Contents: Anti-Mouse/Rat Foxp3 eFluor® 450
REF **Catalog Number:** 48-5773
Clone: FJK-16s
Concentration: 0.2 mg/mL
Host/Isotype: Rat IgG2a, kappa

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.
LOT **Batch Code:** Refer to Vial
Use By: Refer to Vial
Caution, contains Azide

Description

The FJK-16s antibody reacts with mouse, rat, dog, porcine, bovine and cat Foxp3 also known as FORKHEAD BOX P3, SCURFIN, and JM2; cross reactivity of this antibody to other proteins has not been determined. Foxp3, a 49-55 kDa protein, is a member of the forkhead/winged-helix family of transcriptional regulators, and was identified as the gene defective in 'scurfy' (sf) mice. Constitutive high expression of foxP3 mRNA has been shown in CD4+CD25+ regulatory T cells (Treg cells), and ectopic expression of foxp3 in CD4+CD25- cells imparts a Treg phenotype in these cells.

Immunoblotting with FJK-16s antibody has mapped the epitope to amino acids 75-125 of the mouse Foxp3 protein. In the human, this region has been shown to be alternatively spliced at the mRNA level. Both the alternatively-spliced and non-spliced isoforms are present in the CD4+CD25+ subset of lymphocytes. Preliminary RT-PCR experiments have not revealed this alternatively-spliced isoform in mouse splenocytes, suggesting different gene regulation in the mouse and human.

Intracellular staining of mouse splenocytes with FJK-16s using the PE anti-mouse/rat Foxp3 Staining Set and protocol reveals approximately 2% of total cells in the C57Bl/6 strain and approximately 3-5% in the BALB/c mouse strain. Multicolor flow cytometric analysis demonstrates approximately 90% of the CD4+CD25+ cells and 4% of the CD4+CD25- cells staining with FJK-16s. B220+, CD11b+, CD11c+, and Ly6G/Gr-1+ cells do not show significant co-staining with FJK-16s.

Please see our FAQ regarding the usage of eBioscience Foxp3 reagents.

Please note that FJK-16s has been optimized for use with the Foxp3 Staining Set (cat. 72-5775 or 71-5775 or 77-5775). The use of other fixation and staining buffers is not recommended.

Applications Reported

This FJK-16s antibody has been reported for use in intracellular staining followed by flow cytometric analysis.

eFluor® 450 is a replacement for Pacific Blue®. eFluor® 450 emits at 456 nm and is excited with the Violet laser. Please make sure that your instrument is capable of detecting this fluorochome.

Applications Tested

This FJK-16s antibody has been tested by intracellular staining of mouse splenocytes using Foxp3 Buffer Set (cat. 00-5523) and protocol. Please see Best Protocols Section (Staining Intracellular Antigens for Flow Cytometry) for staining protocol (refer to Protocol B: One-step protocol for intracellular (nuclear) proteins). This antibody can be used at less than or equal to 0.06 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.

eFluor™ 450 is a replacement for Pacific Blue®. eFluor™ 450 emits at 456 nm and is excited with the Violet laser (405 nm). Please make sure that your instrument is capable of detecting this fluorochome.

References

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Related Products

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