

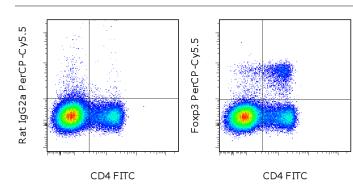
An Affymetrix Company

# Anti-Mouse/Rat Foxp3 PerCP-Cyanine5.5

Catalog Number: 45-5773

Also known as: Forkhead Box P3, Scurfin, JM2

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 intracellular staining with 0.125 ug of Rat IgG2a K Isotype Control PerCP-Cyanine 5.5 (left) or 0.125 ug of Anti-Mouse/Rat Foxp3 PerCP-Cyanine5.5 (right) using the Foxp3 Staining Buffers (cat. 00-5523). Cells in the lymphocyte gate were used for analysis.

#### **Product Information**

Contents: Anti-Mouse/Rat Foxp3 PerCP-

Cyanine5.5

**REF** Catalog Number: 45-5773

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. 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 costaining 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.



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#### **Applications Tested**

This FJK-16s antibody has been tested by intracellular staining of mouse splenocytes using the 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 0.25  $\mu$ g per test. A test is defined as the amount ( $\mu$ g) of antibody that will stain a cell sample in a final volume of 100  $\mu$ L. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

#### References

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Hori S, Nomura T, Sakaguchi S. Control of regulatory T cell development by the transcription factor Foxp3. Science. 2003 Feb 14;299(5609):1057-61.

#### **Related Products**

00-5523 Foxp3 / Transcription Factor Staining Buffer Set

11-0041 Anti-Mouse CD4 FITC (GK1.5)

45-4321 Rat IgG2a K Isotype Control PerCP-Cyanine5.5 (eBR2a)

48-0251 Anti-Mouse CD25 eFluor® 450 (PC61.5)

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