FOXP3 Monoclonal Antibody (FJK-16s), APC, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Bovine, Dog, Cat, Mouse, Pig, Rat
Published Species	Dog, Rat, Pig, Fish, Mouse, Human
Host/Isotope	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), APC, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	FJK-16s
Conjugate	APC
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.1% gelatin
Contains	0.09% sodium azide
Storage Conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_469457

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	1 µg/test	315 Publications
ChIP assay (ChIP)	-	1 Publication
Immunofluorescence (IF)	-	1 Publication
Miscellaneous PubMed (Misc)	-	1 Publication

Product Specific Information

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.

Please note that FJK-16s has been optimized for use with the Foxp3/Transcription Factor Buffer Staining Set (cat. 00-5523). The use of other fixation and staining buffers is not recommended.

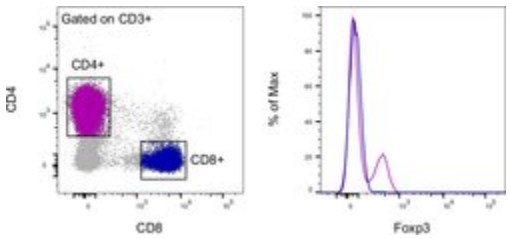
Applications Reported: This FJK-16s antibody has been reported for use in intracellular staining followed by flow cytometric analysis.

Applications Tested: This FJK-16s antibody has been tested by intracellular staining and flow cytometric analysis of mouse splenocytes using the Foxp3/Transcrition Factor 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 1 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.

Excitation: 633-647 nm; Emission: 660 nm; Laser: Red Laser.

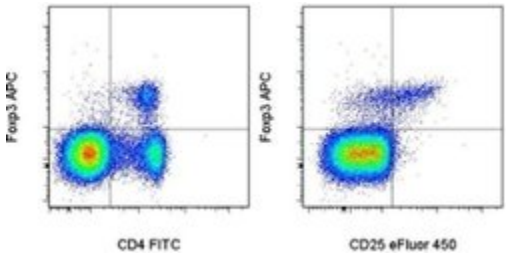
Filtration: 0.2 µm post-manufacturing filtered.

Advanced Verification Data



FOXP3 Antibody (17-5773-82)
Intracellular staining of mouse splenocytes. As expected based on known relative expression patterns, Foxp3 clone FJK-16s stains a subset of the CD4+ T cells and does not stain the CD8+ T cells. Details: Balb/c splenocytes were surface stained with CD3 (clone 17A2), CD4 (clone GK1.5) and CD8 (clone 53-6.7), followed by intracellular staining with Foxp3 (clone FJK-16s) using the Foxp3/Transcription Factor Staining Buffer Set and protocol. Lymphocytes in the CD3+CD8+ (blue histogram) and CD3+CD4+ (purple histogram) gates were used for analysis. Relative expression validation info.

Product Images For FOXP3 Monoclonal Antibody (FJK-16s), APC, eBioscience™



FOXP3 Antibody (17-5773-82) in Flow
Staining of mouse splenocytes with Anti-Mouse CD4 FITC (Product # 11-0041-82) (left) and Anti-Mouse CD25 eFluor® 450 (Product # 48-0251-82) (right) followed by intracellular with Anti-Mouse Foxp3 APC using Foxp3/Transcription Factor Staining Buffers (Product # 00-5523-00). Cells in the lymphocyte gate were used for analysis.

View more figures on thermofisher.com

318 References

Flow Cytometry (315)

Frontiers in immunology

A New Immunosuppressive Molecule Emodin Induces both $CD4^+FoxP3^+$ and $CD8^+CD122^+$ Regulatory T Cells and Suppresses Murine Allograft Rejection.

"17-5773 was used in Flow cytometry/Cell sorting to investigate the capacity of emodin to prolong transplant survival in a mouse model and explore the cellular and molecular mechanisms underlying its action."

Authors: Qiu F,Liu H,Liang CL,Nie GD,Dai Z

Species
Mouse

Dilution
Not Cited

Year
2020

Oncoimmunology

Compensatory upregulation of PD-1, LAG-3, and CTLA-4 limits the efficacy of single-agent checkpoint blockade in metastatic ovarian cancer.

"Published figure using FOXP3 monoclonal antibody (Product # 17-5773-82) in Flow Cytometry"

Authors: Huang RY,Francois A,McGray AR,Miliotto A,Odunsi K

Species
Not Applicable

Dilution
Not Cited

Year
2019

View more Flow references on thermofisher.com

ChIP assay (1)

Immunity

Analyses of a Mutant Foxp3 Allele Reveal BATF as a Critical Transcription Factor in the Differentiation and Accumulation of Tissue Regulatory T Cells.

"17-5773 was used in Chromatin immunoprecipitation to identify BATF as a regulator of tissue regulatory T cells and suggest that sequence-specific perturbations of Foxp3-DNA interactions can influence specific facets of Treg physiology and the immunopathologies."

Authors: Hayatsu N,Miyao T,Tachibana M,Murakami R,Kimura A,Kato T,Kawakami E,Endo TA,Setoguchi R,Watarai H,Nishikawa T,Yasuda T,Yoshida H,Hori S

Species
Mouse

Dilution
Not Cited

Year
2017

Immunofluorescence (1)

PloS one

Suppression of allograft rejection by Tim-1-Fc through cross-linking with a novel Tim-1 binding partner on T cells.

"17-5773 was used in Immunofluorescence to indicate that Tim-1-Fc can inhibit T-cell responses through an unknown Tim-1 binding partner on T cells."

Authors: Xiao L,Fu ZR,Liu F,Zhang LD,Shi XM,Shen XY,Ni ZJ,Fu H,Li RD,Cao XT,Ding GS,Wang QX

Species
Mouse

Dilution
Not Cited

Year
2011

More applications with references on thermofisher.com

Misc (1)