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

Product Details	
Size	100 µg
Species Reactivity	Bovine, Dog, Cat, Mouse, Pig, Rat
Published Species	Dog, Rat, Pig, Fish, Cat, Mouse, Human, Horse
Host/Isotope	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), PE, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	FJK-16s
Conjugate	PE
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_465936

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	1 µg/test	424 Publications
Functional Assay (FN)	-	1 Publication
Immunocytochemistry (ICC)	-	3 Publications
Immunofluorescence (IF)	-	8 Publications
Immunohistochemistry (Frozen) (IHC (F))	-	1 Publication
Immunohistochemistry (IHC)	-	4 Publications
In vitro Assay (IV)	-	1 Publication
Western Blot (WB)	-	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.

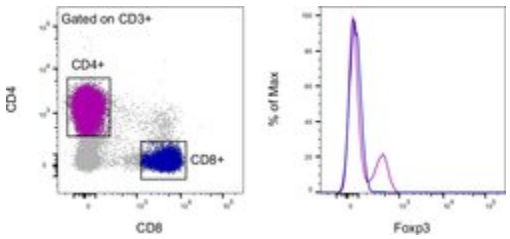
Applications Reported: This FJK-16s antibody has been reported for use in intracellular flow cytometric analysis.

Applications Tested: This FJK-16s antibody has been tested by intracellular flow cytometric analysis of mouse splenocytes using the Foxp3/Transcription Factor Staining 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: 488-561 nm; Emission: 578 nm; Laser: Blue Laser, Green Laser, Yellow-Green Laser.

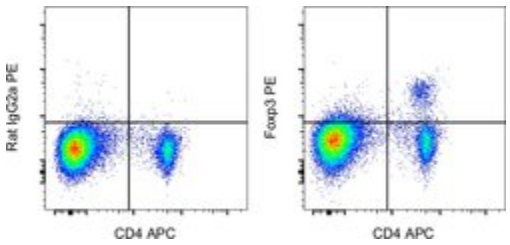
Filtration: 0.2 µm post-manufacturing filtered.

Advanced Verification Data



FOXP3 Antibody (12-5773-82)
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), PE, eBioscience™



FOXP3 Antibody (12-5773-82) in Flow
C57BL/6 mouse splenocytes were stained intracellularly, using the Foxp3 /Transcription Factor Staining Buffer Set (Product # 00-5523-00) and protocol, with CD4 Monoclonal Antibody, APC (Product # 17-0042-82) and 0.5 µg of Rat IgG2a kappa Isotype Control, PE (Product # 12-4321-82) (left) or 0.5 µg of Foxp3 Monoclonal Antibody, PE (right). Cells in the lymphocyte gate were used for analysis.

View more figures on thermofisher.com

443 References

Flow Cytometry (424)

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 # 12-5773-82) in Flow Cytometry"

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

Species Mouse

Dilution Not Cited

Year 2019

Oncoimmunology

Improved migration of tumor ascites lymphocytes to ovarian cancer microenvironment by CXCR2 transduction.

"12-5773 was used in Flow cytometry/Cell sorting to study whether T cells expressing chemokine receptors matching chemokine expression in the tumour microenvironment would improve homing to immunosuppressive tumour sites."

Authors: Idorn M,Olsen M,Halldórsdóttir HR,Skadborg SK,Pedersen M,Høgdall C,Høgdall E,Met Ö,Thor Straten P

Species Mouse

Dilution Not Cited

Year 2019

View more Flow references on thermofisher.com

Immunocytochemistry (3)

The Journal of clinical investigation

PPAR deacetylation dissociates thiazolidinedione's metabolic benefits from its adverse effects.

"12-5773 was used in Immunocytochemistry-immunoflourescence to show that targeted PPAR mutations result in constitutive deacetylation, increased energy expenditure and protect from visceral adiposity and diet-induced obesity by augmenting brown remodelling of white adipose tissues."

Authors: Kraakman MJ,Liu Q,Postigo-Fernandez J,Ji R,Kon N,Larrea D,Namwanje M,Fan L,Chan M,Area-Gomez E,Fu W,Creusot RJ,Qiang L

Species Mouse

Dilution Not Cited

Year 2018

Immunology and cell biology

The bullseye synapse formed between CD4+ T-cell and staphylococcal enterotoxin B-pulsed dendritic cell is a suppressive synapse in T-cell response.

"12-5773 was used in Immunocytochemistry to indicate that bullseye immunological synapse formation is mediated by cytotoxic T-lymphocyte antigen-4, and may negatively control T-cell activation as a suppressive synapse."

Authors: Lin W,Fan Z,Suo Y,Deng Y,Zhang M,Wang J,Wei X,Chu Y

Species Mouse

Dilution Not Cited

Year 2015

View more ICC references on thermofisher.com

More applications with references on thermofisher.com

IF (8) IHC (4) WB (1) IV (1) FN (1) IHC (F) (1)