FOXP3 Monoclonal Antibody (PCH101), PE, eBioscience™

Product Details	
Size	25 Tests
Species Reactivity	Chimpanzee, Cynomolgus monkey, Human, Non-human primate, Rhesus monkey
Published Species	Baboon, Non-human primate, Human, Mouse, Rhesus monkey, Chimpanzee
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), PE, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	PCH101
Conjugate	PE
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.1% gelatin, 0.2% BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_1518783

Applications	Tested Dilution	Publications
Western Blot (WB)	-	1 Publication
Immunohistochemistry (Paraffin) (IHC (P))	-	1 Publication
Immunocytochemistry (ICC/IF)	-	1 Publication
Flow Cytometry (Flow)	5 µL (0.25 µg)/test	111 Publications

Product Specific Information

Description: eBioscience offers a panel of monoclonal antibodies to different epitopes of human Foxp3, providing useful tools for investigating the complete expression pattern of Foxp3 at the protein level, and discerning the precise subsets of Foxp3^+ cells.

The PCH101 antibody reacts with the amino terminus of human foxp3 protein 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.

Intracellular staining of human peripheral blood mononuclear cells (PBMCs) with PCH101 antibody using the anti-human Foxp3 Staining Set and protocol reveals approximately 0.5-4% of lymphocytes staining, with the majority of staining occurring in the CD25^bright population. This is subject to donor variability.

PCH101 crossreacts with rhesus, chimpanzee and cynomolgus. We recommend the use of CD4 (OKT4, cat. 11-0048, or RPA-T4,

cat. 11-0049, depending on the species) and CD25 (BC96, cat. 17-0259).

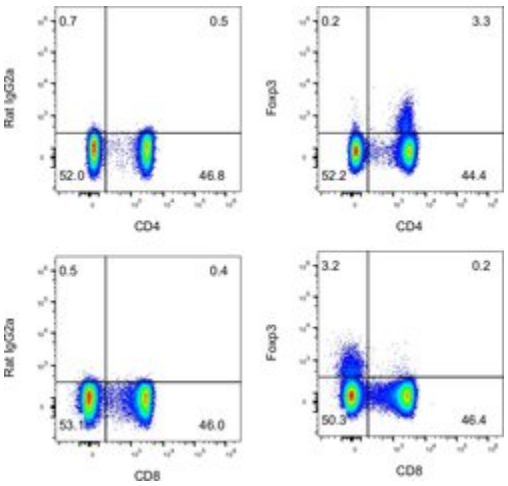
Applications Reported: This PCH101 antibody has been reported for use in intracellular staining followed by flow cytometric analysis.

Applications Tested: This PCH101 antibody has been pre-titrated and tested by intracellular flow cytometric analysis of human peripheral blood leukocytes using the Anti-Human Foxp3 PE Staining Set (cat. 72-5776) and protocol. Refer to Best Protocols- (refer to Protocol B: One-step protocol for intracellular (nuclear) proteins). This can be used at 5 µL (0.25 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 10e5 to 10e8 cells/test.

Excitation: 488-561 nm; Emission: 578 nm; Laser: Blue Laser, Green Laser, Yellow-Green Laser.

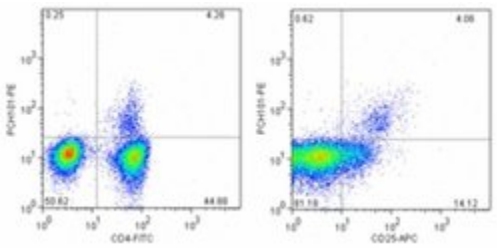
Filtration: 0.2 µm post-manufacturing filtered.

Advanced Verification Data



FOXP3 Antibody (12-4776-41)
Intracellular staining of human peripheral blood cells. As expected based on known relative expression patterns, Foxp3 clone PCH101 stains a subset of the CD4+ T cells and does not stain the CD8+ T cells. Details: Normal human peripheral blood cells were surface stained with CD3 (clone UCHT1), CD4 (clone RPA-T4, top), and CD8 (clone OKT8, bottom), followed by intracellular staining with Rat IgG2a kappa Isotype Control (left) or Foxp3 (clone PCH101, right) using the Foxp3/Transcription Factor Staining Buffer Set and protocol. Lymphocytes in the CD3+ gate were used for analysis. Relative expression validation info.

Product Images For FOXP3 Monoclonal Antibody (PCH101), PE, eBioscience™



FOXP3 Antibody (12-4776-41) in Flow
Intracellular staining of normal human peripheral blood cells with Anti-Human CD4 FITC (Product # 11-0048-42) (left) or Anti-Human CD25 APC (Product # 17-0259-42) (right) and Anti-Human Foxp3 PE using the Foxp3/Transcription Factor Buffer Set (Product # 00-5523-00). Cells in the lymphocyte gate were used for analysis.

114 References

Western Blot (1)

Nature immunology

Glycolysis controls the induction of human regulatory T cells by modulating the expression of FOXP3 exon 2 splicing variants.

Authors: De Rosa V,Galgani M,Porcellini A,Colamatteo A,Santopaolo M,Zuchegna C,Romano A,De Simone S, Procaccini C,La Rocca C,Carrieri PB,Maniscalco GT,Salvetti M,Buscarinu MC,Franzese A,Mozzillo E,La Cava A, Matarese G

Species
Human

Dilution
Not Cited

Year
2015

Immunohistochemistry (Paraffin) (1)

Blood

Mucosal but not peripheral FOXP3+ regulatory T cells are highly increased in untreated HIV infection and normalize after suppressive HAART.

Authors: Epple HJ,Loddenkemper C,Kunkel D,Tröger H,Maul J,Moos V,Berg E,Ullrich R,Schulzke JD,Stein H, Duchmann R,Zeitz M,Schneider T

Species
Not Applicable

Dilution
Not Cited

Year
2006

Immunocytochemistry (1)

Immune network

Ribavirin Does Not Impair the Suppressive Activity of Foxp3(+)CD4(+) CD25(+) Regulatory T Cells.

"12-4776 was used in Immunofluorescence to demonstrate that ribavirin did not attenuate the suppressive activity of Foxp3(+)CD4(+)CD25(+) Treg cells."

Authors: Lee J,Choi YS,Shin EC

Species
Human

Dilution
Not Cited

Year
2013

Flow Cytometry (111)

MethodsX

A method for conducting suppression assays using small numbers of tissue-isolated regulatory T cells.

"12-4776 was used in Flow cytometry/Cell sorting to describe a method to isolate Treg cells from human tissues and assess the suppressive capacity of Treg cell subsets."

Authors: Ward ST,Li KK,Curbishley SM

Species
Human

Dilution
Not Cited

Year
2022

View more Flow references on thermofisher.com

More applications with references on thermofisher.com

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