FOXP3 Monoclonal Antibody (PCH101), APC, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Chimpanzee, Cynomolgus monkey, Human, Non-human primate, Rhesus monkey
Published Species	Pig, Non-human primate, Human, Mouse, Rhesus monkey
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), APC, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	PCH101
Conjugate	APC
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_1603280

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	1 Publication
Immunohistochemistry (Paraffin) (IHC (P))	-	1 Publication
Flow Cytometry (Flow)	5 µL (0.5 µg)/test	105 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).

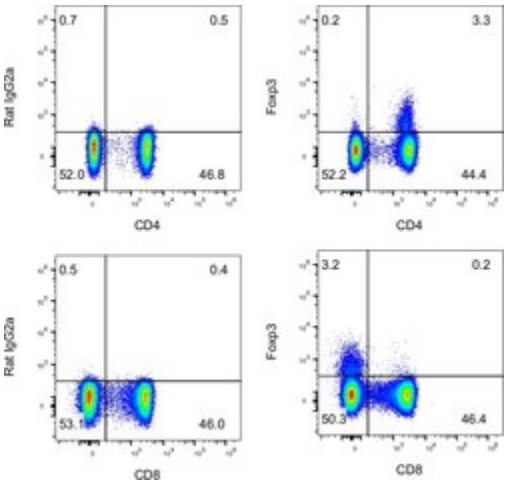
Applications Reported: This PCH101 antibody has been reported for use in intracellular staining followed by flow cytometric analysis.

Applications Tested: This PCH101 antibody has been pre-titrated and tested by intracellular flow cytometric analysis of normal human peripheral blood cells using the Foxp3/Transcription Factor Buffer and protocol. Refer to Best Protocols for Staining Protocol (refer to Protocol B: One-step protocol for intracellular (nuclear) proteins). This can be used at 5 µL (0.5 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.

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

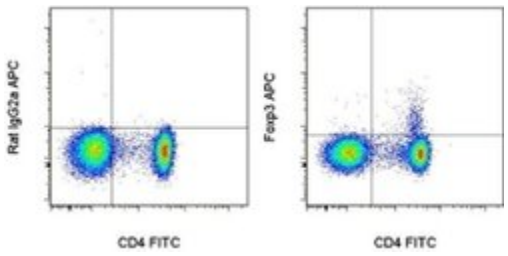
Filtration: 0.2 µm post-manufacturing filtered.

Advanced Verification Data



FOXP3 Antibody (17-4776-42)
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), APC, eBioscience™



FOXP3 Antibody (17-4776-42) in Flow
Surface staining of normal human peripheral blood cells with Anti-Human CD4 FITC (Product # 11-0049-42) followed by intracellular staining with Rat IgG2a K Isotype Control APC (Product # 17-4321-81) (left) or Anti-Human Foxp3 APC (right) using Foxp3/Transcription Factor Staining Buffers (Product # 00-5523-00).

107 References

Immunohistochemistry (1)

Science translational medicine

Inducing CTLA-4-dependent immune regulation by selective CD28 blockade promotes regulatory T cells in organ transplantation.

"17-4776 was used in Immunohistochemistry to suggest that targeting costimulation blockade at CD28 favors CTLA-4-dependent immune regulation and promotes allograft survival."

Authors: Poirier N,Azimzadeh AM,Zhang T,Dilek N,Mary C,Nguyen B,Tillou X,Wu G,Reneaudin K,Hervouet J,Martinet B,Coulon F,Allain-Launay E,Karam G,Soulillou JP,Pierson RN,Blancho G,Vanhove B

Species
Non-human primate

Dilution
Not Cited

Year
2010

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

Flow Cytometry (105)

Frontiers in immunology

Glutamic Acid Decarboxylase Injection Into Lymph Nodes: Beta Cell Function and Immune Responses in Recent Onset Type 1 Diabetes Patients.

"17-4776-42 was used in Flow Cytometry to improve efficacy of GAD-alum treatment using lymph-node administration in combination with oral vitamin D."

Authors: Casas R,Dietrich F,Barcenilla H,Tavira B,Wahlberg J,Achenbach P,Ludvigsson J

Species
Human

Dilution
Not Cited

Year
2021

Cell reports. Medicine

Protein/AS01$_B$ vaccination elicits stronger, more Th2-skewed antigen-specific human T follicular helper cell responses than heterologous viral vectors.

"17-4776-42 was used in Flow Cytometry to highlight the impact of vaccine platform on the cTfh cell response driving humoral immunity, associating a high-magnitude, Th2-biased cTfh response with potent antibody production."

Authors: Nielsen CM,Ogbe A,Pedroza-Pacheco I,Doeleman SE,Chen Y,Silk SE,Barrett JR,Elias SC,Miura K,Diouf A,Bardelli M,Dabbs RA,Barfod L,Long CA,Haynes BF,Payne RO,Minassian AM,Bradley T,Draper SJ,Borrow P

Species
Human

Dilution
Not Cited

Year
2021

View more Flow references on thermofisher.com

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