# FOXP3 Monoclonal Antibody (PCH101), PE-Cyanine5, eBioscience™

#### Product Details

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Size	100 Tests
Species Reactivity	Chimpanzee, Cynomolgus monkey, Human, Non-human primate, Rhesus monkey
Published Species	Human
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), PE-Cyanine5, eBioscience™
Class	Monoclonal
Туре	Antibody
Clone	PCH101
Conjugate	PE-Cyanine5
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_1963595

Applications	Tested Dilution	Publications
Immunohistochemistry (Paraffin) (IHC (P))	-	1 Publication
Flow Cytometry (Flow)	5 μL (0.5 μg)/test	36 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.

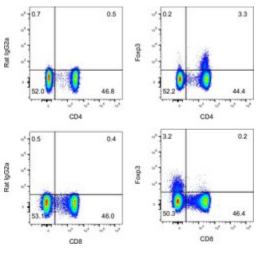
Applications Tested: This PCH101 antibody has been pre-titrated and tested by intracellular staining and flow cytometric analysis of normal human peripheral blood cellsusing the Foxp3/Transcription Factor Buffer Set and protocol. Please refer to Best Best Protocols for Staining Protocol (refer to Protocol B: One-step protocol for intracellular (nuclear) proteins). This can be used at 5  $\mu$ L (0.5  $\mu$ 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 10^5 to 10^8 cells/test.

Light sensitivity: This tandem dye is sensitive photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 µL cell sample + 100 µL IC Fixation Buffer) or 1-step Fix /Lyse Solution (cat. 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency /compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

Excitation: 488-561 nm; Emission: 667 nm; Laser: Blue Laser, Green Laser, Yellow-Green Laser.

Filtration: 0.2 µm post-manufacturing filtered.

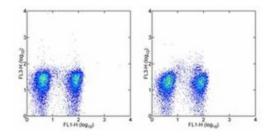


# Advanced Verification Data

#### FOXP3 Antibody (15-4776-42)

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), PE-Cyanine5, eBioscience™



#### FOXP3 Antibody (15-4776-42) in Flow

Staining of normal human peripheral blood mononuclear cells with Anti-Human CD4 FITC (Product # 11-0049-42) and Rat IgG2a K Isotype Control PE-Cyanine5 (Product # 15-4321-80) (left) or Anti-Human Foxp3 PE-Cyanine5 (right) using the Foxp3/Transcription Factor Buffer Set.Cells in the lymphocyte gate were used for analysis.

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# 37 References

# Immunohistochemistry (Paraffin) (1)

Blood	Species
Mucosal but not peripheral FOXP3+ regulatory T cells are highly	Not Applicable
increased in untreated HIV infection and normalize after suppressive	Dilution
HAART.	Not Cited
Authors: Epple HJ,Loddenkemper C,Kunkel D,Tröger H,Maul J,Moos V,Berg E,Ullrich R,Schulzke JD,Stein H,	Year
Duchmann R,Zeitz M,Schneider T	2006
Flow Cytometry (36)	
Journal of Cancer	Species
HDAC Inhibitor, CG-745, Enhances the Anti-Cancer Effect of Anti-PD-1	Not Applicable
Immune Checkpoint Inhibitor by Modulation of the Immune	Dilution
Microenvironment.	Not Cited
"Published figure using FOXP3 monoclonal antibody (Product # 15-4776-42) in Flow Cytometry"	Year
Authors: Kim YD,Park SM,Ha HC,Lee AR,Won H,Cha H,Cho S,Cho JM	2020
Cell reports. Medicine	Species
Human Tumor-Infiltrating MAIT Cells Display Hallmarks of Bacterial	Not Applicable
Antigen Recognition in Colorectal Cancer.	Dilution
"Published figure using FOXP3 monoclonal antibody (Product # 15-4776-42) in Flow Cytometry"	Not Cited
Authors: Li S,Simoni Y,Becht E,Loh CY,Li N,Lachance D,Koo SL,Lim TP,Tan EKW,Mathew R,Nguyen A,Golovato J,	Year
Berkson JD,Prlic M,Lee B,Minot SS,Nagarajan N,Dey N,Tan DSW,Tan IB,Newell EW	2020

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