

FOXP3 Monoclonal Antibody (PCH101), eFluor™ 450, eBioscience™

Product Details	
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), eFluor™ 450, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	PCH101
Conjugate	eFluor™ 450
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_1834364

Applications	Tested Dilution	Publications
Immunohistochemistry (Paraffin) (IHC (P))	-	1 Publication
Immunocytochemistry (ICC/IF)	-	1 Publication
Flow Cytometry (Flow)	5 µL (0.5 µg)/test	16 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.

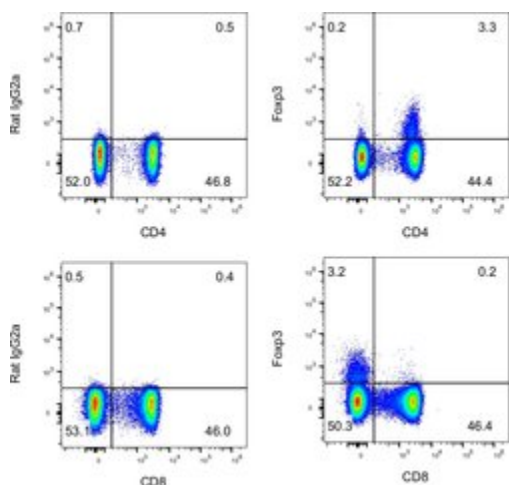
Applications Tested: This PCH101 antibody has been pre-titrated and tested by intracellular staining and by flow cytometric analysis using the Foxp3/Transcription Factor Staining Buffer Set (cat. 00-5523) and protocol. Please see Best Protocols Section (Staining intracellular Antigens for Flow Cytometry) for staining protocol (refer to Protocol B: One-step protocol for intracellular (nuclear) proteins). This antibody can be used at 5 μ L (0.5 μ g) per test. A test is defined as the amount (μ g) of antibody that will stain a cell sample in a final volume of 100 μ L. Cell number should be determined empirically but can range from 10^5 to 10^8 cells/test.

eFluor® 450 is an alternative to Pacific Blue®. eFluor® 450 emits at 445 nm and is excited with the Violet laser (405 nm). Please make sure that your instrument is capable of detecting this fluorochoime.

Excitation: 405 nm; Emission: 445 nm; Laser: Violet Laser.

Filtration: 0.2 μ m post-manufacturing filtered.

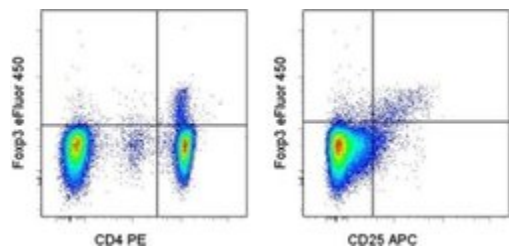
Advanced Verification Data



FOXP3 Antibody (48-4776-42)

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), eFluor™ 450, eBioscience™



FOXP3 Antibody (48-4776-42) in Flow

Surface staining of normal human peripheral blood cells with Anti-Human CD4 PE (Product # 12-0049-42) (left) or Anti-Human CD25 APC (Product # 17-0259-42) (right) followed by fixation and permeabilization with the Foxp3/Transcription Factor Staining Buffer Set (Product # 00-5523-00) and intracellular staining with Anti-Human Foxp3 eFluor® 450. Cells in the lymphocyte gate were used for analysis.

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)

PLoS one

Protection against bronchiolitis obliterans syndrome is associated with allograft CCR7+ CD45RA- T regulatory cells.

"48-4776 was used in Flow cytometry/Cell sorting to hypothesize that frequencies of Treg in bronchoalveolar lavage fluid after lung transplantation would predict subsequent development of bronchiolitis obliterans syndrome."

Authors: Gregson AL, Hoji A, Palchevskiy V, Hu S, Weigt SS, Liao E, Derhovanessian A, Saggarr R, Song S, Elashoff R, Yang OO, Belperio JA

Species
Human

Dilution
Not Cited

Year
2010

Flow Cytometry (16)

Nature immunology

A regulatory T cell Notch4-GDF15 axis licenses tissue inflammation in asthma.

"48-4776 was used in Flow cytometry/Cell sorting to find that interleukin-6- and STAT3 transcription factor-dependent upregulation of Notch4 receptor on lung tissue regulatory T (Treg) cells is necessary for allergens and particulate matter pollutants to promote airway inflammation."

Authors: Harb H, Stephen-Victor E, Crestani E, Benamar M, Massoud A, Cui Y, Charbonnier LM, Arbag S, Baris S, Cunnigham A, Leyva-Castillo JM, Geha RS, Mousavi AJ, Guennevig B, Schmitz-Abe K, Sioutas C, Phipatanakul W, Chatila TA

Species
Human

Dilution
1:200

Year
2020

Cell reports

Clusters of Tolerogenic B Cells Feature in the Dynamic Immunological Landscape of the Pregnant Uterus.

"48-4776-42 was used in Flow Cytometry to suggest a role for B cells in healthy pregnancy."

Authors: Benner M, Feyaerts D, García CC, Inci N, López SC, Fasse E, Shadmanfar W, van der Heijden OWH, Gorris MAJ, Joosten I, Ferwerda G, van der Molen RG

Species
Human

Dilution
Not Cited

Year
2020

[View more Flow references on thermofisher.com](#)

More applications with references on thermofisher.com

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.