FOXP3 Monoclonal Antibody (PCH101), Alexa Fluor™ 488, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Chimpanzee, Cynomolgus monkey, Human, Non-human primate, Rhesus monkey
Published Species	Human, Horse, Rhesus monkey
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), Alexa Fluor™ 488, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	PCH101
Conjugate	Alexa Fluor™ 488
Excitation/Emission Max	499/520 nm
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.2% BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_11043133

Applications	Tested Dilution	Publications
Western Blot (WB)	-	1 Publication
Immunohistochemistry (IHC)	-	12 Publications
Immunohistochemistry (Paraffin) (IHC (P))	-	1 Publication
Immunocytochemistry (ICC/IF)	-	1 Publication
Flow Cytometry (Flow)	5 µL (0.5 µg)/test	64 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).

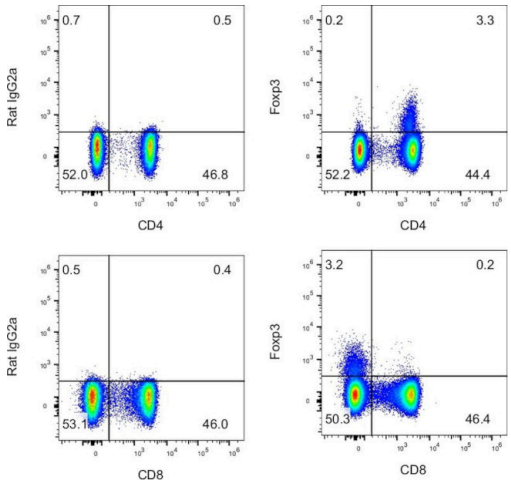
Applications Reported: This PCH101 antibody has been reported for use in intracellular staining followed by flow cytometric analysis.

Applications Tested: This PCH101 antibody has been pre-titrated and tested by intracellular staining and flow cytometric analysis of normal human peripheral blood cells using the Foxp3/Transcription Factor Buffer Staining Set (cat. 00-5523) and Protocol. Please refer to Best Protocol of normal human peripheral blood cells using the Foxp3 Buffers and protocol. Please refer to Best Protocols for instructions. 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.

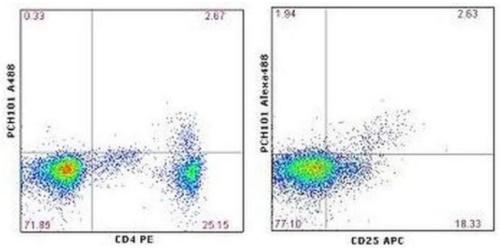
Excitation: 488 nm; Emission: 519 nm; Laser: Blue Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For FOXP3 Monoclonal Antibody (PCH101), Alexa Fluor™ 488, eBioscience™



FOXP3 Antibody (53-4776-42)
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. {RE}



FOXP3 Antibody (53-4776-42) in Flow
Normal human peripheral blood cells were surface-stained with Anti-Human CD4 PE (Product # 12-0049-42) (left) and Anti-Human CD25 APC (Product # 17-0259-42) (right) followed by fixation and permeabilization using Foxp3/Transcription Factor Buffer Staining Set (Product # 00-5523-00) and subsequently stained with Anti-Human Foxp3 Alexa Fluor® 488. Cells in the lymphocyte gate were used for analysis.

View more figures on thermofisher.com

79 References

Western Blot (1)

Nature immunology

Year
2015

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

"Published figure using FOXP3 monoclonal antibody (Product # 53-4776-42) in Western Blot"

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

Immunohistochemistry (12)

Neural regeneration research

Year
2021

VX-765 reduces neuroinflammation after spinal cord injury in mice.

"Published figure using FOXP3 monoclonal antibody (Product # 53-4776-42) in Immunohistochemistry"

Authors: Chen J,Chen YQ,Shi YJ,Ding SQ,Shen L,Wang R,Wang QY,Zha C,Ding H,Hu JG,Lü HZ

NPJ breast cancer

Year
2021

Unmasking the immune microecology of ductal carcinoma in situ with deep learning.

"Published figure using FOXP3 monoclonal antibody (Product # 53-4776-42) in Immunohistochemistry"

Authors: Narayanan PL,Raza SEA,Hall AH,Marks JR,King L,West RB,Hernandez L,Guppy N,Dowsett M,Gusterson B, Maley C,Hwang ES,Yuan Y

View more IHC references on thermofisher.com

Immunohistochemistry (Paraffin) (1)

Blood

Year
2006

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

More applications with references on thermofisher.com

ICC/IF (1) **Flow (64)**

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