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Product Information

Contents: Affinity Purified anti-human Foxp3

Catalog Number: 14-4776

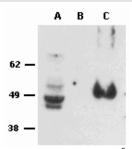
Sizes: 25 ug, 100 ug

Formulation: Phosphate buffer pH 7.2,

150 mM NaCl, 0.09% NaN₃

Storage Conditions: Store at 4°C. Avoid repeated freeze/thaw cycles.

Clone: PCH101 Isotype: Rat IgG2a, κ



Immunoblotting of PBMC cell lysates from 10⁶ cells (Lane A), BALB/c splenocyte cell lysates from 10⁶ cells (Lane B), or recombinant human FoxP3 fusion protein (Lane C); probed with 2 µg/mL of purified antihuman Foxp3 (PCH101). Bands are revealed with HRP anti-rat IgG. Cell lysates were prepared by direct sonication in sample loading buffer.

Available Formats of This Product				
Cat. No.	Format	Excite (nm)	Emit (nm)	Reported Applications
11-4776	FITC anti-human Foxp3	488	518	IC IHC(Paraffin)
12-4776	PE anti-human Foxp3	488	575	IC
13-4776	Biotin anti-human Foxp3	N/A	N/A	IC IH/F IHC(Paraffin) WB
14-4776	Affinity Purified anti-human Foxp3	N/A	N/A	IH/F IHC(Paraffin) WB
15-4776	Phycoerythrin-Cy5 (PE-Cy5) anti-human Foxp3	488	670	IC
17-4776	APC anti-human Foxp3	633	660	IC
51-4776	~2-3 weeks upon ordering - Alexa Fluor® 647 anti-human Foxp3			IC
52-4776	~2-3 weeks upon ordering - Alexa Fluor® 405 anti-human Foxp3			IC
53-4776	~2-3 weeks upon ordering - Alexa Fluor® 488 anti-human Foxp3			IC
56-4776	~2-3 weeks upon ordering - Alexa Fluor® 700 anti-human Foxp3			IC

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. Please contact tech@ebioscience.com or 888.810.6168 for any additional assistance.

Please see the following link for FAQ regarding the usage of eBioscience Foxp3 reagents.

http://www.ebioscience.com/ebioscience/Foxp3FAQs.htm

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 and cynomolgus. We recommend the use of CD4 (OKT4, 11-0048) and CD25 (BC96, 17-0259).

For research use only, not for diagnostic or therapeutic use. This PCH101 antibody has been reported for use in immunoblotting (WB) and immunohistology on frozen and paraffin-embedded tissue sections. Use of the purified format is not recommended for intracellular staining for flow cytometric analysis. For additional information on IHC, please the Foxp3 FAQs http://www.ebioscience.com/ebioscience/Foxp3FAOs.htm

Applications Tested

This PCH101 antibody has been tested by immunoblotting (WB) (1-5µg/ml) of normal human peripheral blood leukocytes.

Related Products

Cat. 14-4321	Affinity Purified Rat 19G2a Isotype Control
Cat. 11-4776	FITC anti-human Foxp3 (clone PCH101)
Cat. 13-4776	Biotin anti-human Foxp3 (clone PCH101)
Cat. 53-4776	Alexa Fluor® 488 anti-human Foxp3 (clone PCH101)
Cat. 72-5776	PE anti-human Foxp3 Staining Set (preferentially stains CD4+CD25hi) (clone PCH101 Set)
Cat. 14-7979	Affinity Purified anti-mouse/human Foxp3 (clone eBio7979)

References

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Crellin NK, Garcia RV, Hadisfar O, Allan SE, Steiner TS, Levings MK. 2005. Human CD4+ T Cells Express TLR5 and Its Ligand Flagellin Enhances the Suppressive Capacity and Expression of FOXP3 in CD4+CD25+ T Regulatory Cells. J Immunol. 2005 Dec 15;175 (12):8051-9. (PCH101, intracellular flow, PubMed)

Hartwig UF, Nonn M, Khan S, Meyer RG, Huber C, Herr W. Depletion of alloreactive T cells via CD69: implications on antiviral, antileukemic and immunoregulatory T lymphocytes. Bone Marrow Transplant. 2005 Dec 5; [Epub ahead of print] [Intracellular staining for flow cytometry using PCH101, PubMed]

Lim, H.W., P. Hillsamer, A.H. Banham, and C.H. Kim. 2005. Cutting Edge: Direct Suppression of B cells by CD4+CD25+ Regulatory T cells. *J. Immunol*. 175: 4180-4183. (PCH101, intracellular flow, PubMed)

Sakaguchi S. 2003. The origin of FOXP3-expressing CD4+ regulatory T cells: thymus or periphery. J Clin Invest. 112(9):1310-2.

Hori S, Nomura T, Sakaguchi S. 2003. Control of regulatory T cell development by the transcription factor Foxp3. Science. 299 (5609):1057-61.

Takahata Y, Nomura A, Takada H, Ohga S, Furuno K, Hikino S, Nakayama H, Sakaguchi S, Hara T. 2004. CD25+CD4+ T cells in human cord blood: an immunoregulatory subset with naive phenotype and specific expression of forkhead box p3 (Foxp3) gene. Exp Hematol. 32(7):622-9.

Xystrakis E, Dejean AS, Bernard I, Druet P, Liblau R, Gonzalez-Dunia D, Saoudi A. 2004. Identification of a novel natural regulatory CD8 T-cell subset and analysis of its mechanism of regulation. Blood. 104(10):3294-301.

Manavalan JS, Kim-Schulze S, Scotto L, Naiyer AJ, Vlad G, Colombo PC, Marboe C, Mancini D, Cortesini R, Suciu-Foca N.2004. Alloantigen specific CD8+CD28- FOXP3+ T suppressor cells induce ILT3+ ILT4+ tolerogenic endothelial cells, inhibiting alloreactivity. Int Immunol. 16(8):1055-68.