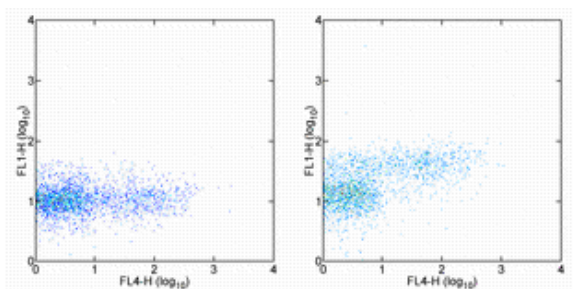


Anti-Foxp3 Alexa Fluor® 488

Catalog Number: 53-4774

Also Known As: Forkhead Box P3, Scurfin, JM2, Treg

RUO: For Research Use Only



Staining of C57BL/6 splenocytes with Anti-Mouse CD25 APC (cat. 17-0251) and Anti-Mouse CD4 PE (cat. 12-0041) followed by fixation and permeabilization using Foxp3 Staining Buffers (cat. 00-5523) and subsequently stained with Mouse IgG1 kappa Isotype Control Alexa Fluor® 488 (cat. 53-4714) (left) or Anti-Foxp3 Alexa Fluor® 488 (right). CD4+ cells in the lymphocyte gate were used for analysis.

Product Information

Contents: Anti-Foxp3 Alexa Fluor® 488

REF **Catalog Number:** 53-4774

Clone: 150D/E4

Concentration: 5 µl (0.5 µg)/test

Host/Isotype: Mouse IgG1

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer

Temperature Limitation: Store at 2-8°C. Do not freeze. Light sensitive material.

LOT **Batch Code:** Refer to Vial

Use By: Refer to Vial

Caution, contains Azide

Description

eBioscience offers a panel of monoclonal antibodies to different epitopes of human/primate and mouse/rat Foxp3 protein, providing useful tools for investigating the complete expression pattern of Foxp3 at the protein level, and discerning the precise subsets of Foxp3+ cells. Other antibodies to Foxp3 available from eBioscience, which have been used significantly in scientific literature, include the anti-human Foxp3 PCH101 (cat. 72-5776) and ebio7979 (cat. 12-7979), and the anti-mouse/rat Foxp3 FJK-16s (cat. 72-5775). The 150D/E4 has been mapped to the splice region in Exon 2 found in human cells. The splicing of this region has not been shown to occur in mouse. Characterization of this antibody to the splice variant has been limited to epitope mapping. It should be noted that other antibodies such as PCH101 and 236A/E7 will recognize both the spliced and full length forms of the Foxp3 protein and stain more intensely than 150D/E4 and FJK-16s in human cells.

The 150D/E4 antibody reacts with mouse/rat/human Foxp3 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.

Applications Reported

This 150D/E4 antibody has been reported for use in intracellular staining followed by flow cytometric analysis.

Applications Tested

This 150D/E4 antibody has been pre-titrated and tested by intracellular staining and flow cytometric analysis of mouse splenocytes using the Foxp3 Buffer Set (cat. 00-5523) and protocol. Please click here for Staining Protocol (refer to Protocol B: One-step protocol for intracellular (nuclear) proteins). This antibody can be used at 5 µl (0.5 µg)/per test. A test is defined as the amount (µg)/test 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 10⁵ to 10⁸ cells/test.

Special Notes

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

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

The staining protocol has been optimized with freshly Ficoll prepped PBMCs or mouse splenocytes. The use of lysed whole blood is not recommended.

It is critical that this antibody be used in conjunction with the Foxp3 Staining Buffers (cat 00-5523) for flow cytometric analysis.

References

Fontenot, JD., Rasmussen, JP., Williams, LM., Dooley, JL., Farr, AG., Rudensky AY. 2005. Regulatory T cell lineage specification by the forkhead transcription factor foxp3. *Immunity*. 22(3): 329-41.

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

Roncador G, Brown PJ, Maestre L, Hue S, Martinez-Torrecuadrada JL, Ling KL, Pratap S, Toms C, Fox BC, Cerundolo V, Powrie F, Banham AH. Analysis of FOXP3 protein expression in human CD4+CD25+ regulatory T cells at the single-cell level. *Eur J Immunol*. 2005 Jun;35(6):1681-91 (150D, IHC, PubMed).

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

Related Products

00-5521 Foxp3 Fixation/Permeabilization Concentrate and Diluent

00-5523 Foxp3 Staining Buffer Set

12-0041 Anti-Mouse CD4 PE (GK1.5)

17-0251 Anti-Mouse CD25 APC (PC61.5)

53-4714 Mouse IgG1 K Isotype Control Alexa Fluor® 488

Legal

Alexa Fluor® and Pacific Blue® are registered trademarks of and licensed under patents assigned to Molecular Probes, Inc. for research use only. This product is subject to an agreement between Molecular Probes, Inc. and eBioscience, and the manufacture, use, sale or import of this product may be subject to one or more U.S. patents, pending applications and corresponding foreign equivalents, owned by Molecular Probes, Inc. (a wholly owned subsidiary of Invitrogen Corp). The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product for life science research or as an ASR. The buyer cannot use this product for manufacturing or for any other screening (specifically including use in combination with microarrays or High Content Screening) or testing purpose, other than as an ASR. For information on purchasing a license to this product for purposes other than life science research or use as an ASR, contact Molecular Probes, Inc.

Not for further distribution without written consent.

Copyright © 2000-2010 eBioscience, Inc.

Tel: 888.999.1371 or 858.642.2058 • Fax: 858.642.2046 • www.eBioscience.com • info@eBioscience.com