

## Anti-Human Foxp3 Alexa Fluor® 488

**Catalog Number:** 53-4777

**Also known as:** Forkhead Box P3, Scurfin, JM2

**RUO: For Research Use Only. Not for use in diagnostic procedures.**

### Product Information

**Contents:** Anti-Human Foxp3 Alexa Fluor® 488



**Catalog Number:** 53-4777

**Clone:** 236A/E7

**Concentration:** 5 uL (0.5 ug)/test

**Host/Isotype:** Mouse IgG1, kappa

**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.

**Batch Code:** Refer to vial

**Use By:** Refer to vial

**Contains sodium azide**



### Description

The 236A/E7 antibody reacts with 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 and flow cytometric analysis of freshly isolated human peripheral blood mononuclear cells (PBMCs) with the 236A/E7 antibody using the Foxp3 Staining Buffer Set (cat. 00-5523) and protocol reveals staining of the CD4+CD25<sup>bright</sup> population.

The epitope from 236A/E7 is different from that of PCH101 (cat. 72-5776).

### Applications Reported

This 236A/E7 antibody has been reported for use in intracellular staining followed by flow cytometric analysis and IHC.

### Applications Tested

This 236A/E7 antibody has been pre-titrated and tested by intracellular staining and flow cytometric analysis of normal human peripheral blood mononuclear cells using the Foxp3 Buffers 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 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<sup>5</sup> to 10<sup>8</sup> cells/test.

### References

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Roncador G, Garcia JF, Garcia JF, Maestre L, Lucas E, Menarguez J, Ohshima K, Nakamura S, Banham AH, Piris MA. FOXP3, a selective marker for a subset of adult T-cell leukaemia/lymphoma. *Leukemia.* 2005 Dec;19(12):2247-

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53. (IHC paraffin sections using 236A/E7, PubMed)

Wolf D, Wolf AM, Rumpold H, Fiegl H, Zeimet AG, Muller-Holzner E, Deibl M, Gastl G, Gunsilius E, Marth C. The expression of the regulatory T cell-specific forkhead box transcription factor FoxP3 is associated with poor prognosis in ovarian cancer. *Clin Cancer Res.* 2005 Dec 1;11(23):8326-31. (IHC paraffin using 236A/E7, PubMed)

Alvaro T, Lejeune M, Salvado MT, Bosch R, Garcia JF, Jaen J, Banham AH, Roncador G, Montalban C, Piris MA. Outcome in Hodgkin's lymphoma can be predicted from the presence of accompanying cytotoxic and regulatory T cells. *Clin Cancer Res.* 2005 11(4):1467-73. (IHC paraffin using 236A/E7, PubMed)

Takahata Y, Nomura A, Takada H, Ohga S, Furuno K, Hikino S, Nakayama H, Sakaguchi S, Hara T. 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.* 2004 32(7):622-9.

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

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

### Related Products

00-5521 Foxp3 Fixation/Permeabilization Concentrate and Diluent

00-5523 Foxp3 / Transcription Factor Staining Buffer Set

12-0259 Anti-Human CD25 PE (BC96)

53-4714 Mouse IgG1 K Isotype Control Alexa Fluor<sup>®</sup> 488 (P3.6.2.8.1)

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