

Anti-Helios Alexa Fluor® 647

Catalog Number: 51-9883

Also known as: Ikaros family zinc finger 2, IKZF2 RUO: For Research Use Only. Not for use in diagnostic procedures.



Product Information



Description

This 22F6 monoclonal antibody reacts with human, mouse and canine Helios. Helios is a zinc-finger transcription factor first identified for its similarity to Ikaros. It is expressed in hematopoietic stem cells in both the embryo and adult mice. While the highest expression is found in regulatory T cells, Helios is not expressed in mature B cells, dendritic cells or myeloid cells. Helios can form a homodimer as well as heterodimerize with other Ikaros family members to regulate transcription. Eight isoforms of Helios exist, some of which possess a dominant-negative function that has also been found to be upregulated in lymphoid malignancies, including T-acute lymphoblastic leukemia.

Applications Reported

This 22F6 antibody has been reported for use in intracellular flow cytometric analysis.

Applications Tested

This 22F6 antibody has been tested by intracellular flow cytometric analysis of normal human peripheral blood cells or mouse lymph node cells using the Foxp3 Staining Buffer Set (cat. 00-5523). This can be used at less than or equal to 0.125 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 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

Gottschalk RA, Corse E, Allison JP. Expression of helios in peripherally induced foxp3+ regulatory T cells. J Immunol. 2012 Feb 1;188(3):976-80.

Narni-Mancinelli E, Jaeger BN, Bernat C, Fenis A, Kung S, De Gassart A, Mahmood S, Gut M, Heath SC, Estellé J, Bertosio E, Vely F, Gastinel LN, Beutler B, Malissen B, Malissen M, Gut IG, Vivier E, Ugolini S. Tuning of natural killer cell reactivity by NKp46 and Helios calibrates T cell responses. Science. 2012 Jan 20;335(6066):344-8.

Pinheiro D, Singh Y, Grant CR, Appleton RC, Sacchini F, Walker KR, Chadbourne AH, Palmer CA, Armitage-Chan E, Thompson I, Williamson L, Cunningham F, Garden OA. Phenotypic and functional characterization of a CD4(+)



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CD25(high) FOXP3(high) regulatory T-cell population in the dog. Immunology. 2011 Jan;132(1):111-22. (**22F6**, canine, FC)

Thornton AM, Korty PE, Tran DQ, Wohlfert EA, Murray PE, Belkaid Y, Shevach EM. Expression of Helios, an Ikaros transcription factor family member, differentiates thymic-derived from peripherally induced Foxp3+ T regulatory cells. J Immunol. 2010 Apr 1;184(7):3433-41. (**22F6**, FC)

Getnet D, Grosso JF, Goldberg MV, Harris TJ, Yen HR, Bruno TC, Durham NM, Hipkiss EL, Pyle KJ, Wada S, Pan F, Pardoll DM, Drake CG. A role for the transcription factor Helios in human CD4(+)CD25(+) regulatory T cells. Mol Immunol. 2010 Apr;47(7-8):1595-600.

Rebollo A, Schmitt C. Ikaros, Aiolos and Helios: transcription regulators and lymphoid malignancies. Immunol Cell Biol. 2003 Jun;81(3):171-5.

Related Products

00-5523 Foxp3 / Transcription Factor Staining Buffer Set 12-0251 Anti-Mouse CD25 PE (PC61.5) 46-0042 Anti-Mouse CD4 PerCP-eFluor® 710 (RM4-5) 48-5773 Anti-Mouse/Rat Foxp3 eFluor® 450 (FJK-16s) 51-4888 Armenian Hamster IgG Isotype Control Alexa Fluor® 647 (To Be Discontinued. Refer to Cat. No. 50-4888) (eBio299Arm)

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