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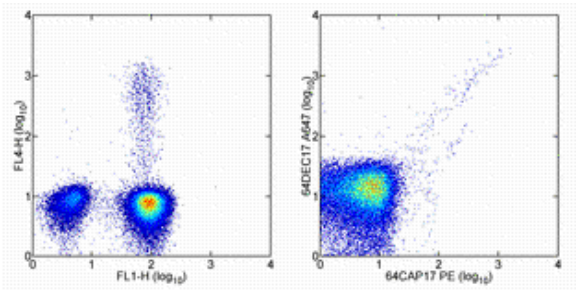
eBioscience®

Anti-Human IL-17A Alexa Fluor® 647

Catalog Number: 51-7179
Also Known As: Interleukin-17A, CTLA8
RUO: For Research Use Only. Not for use in diagnostic procedures.



Intracellular staining human peripheral blood cells stimulated with PMA/Ionomycin for 5 hours in the presence of monensin. Anti-Human CD3 FITC (cat. 11-0038) and Anti-Human Il-17A Alexa Fluor® 647. The co-staining of two IL-17A antibody clones (eBio64CAP17 and eBio64DEC17) confirms specificity.

Product Information

Contents: Anti-Human IL-17A Alexa Fluor® 647
REF **Catalog Number:** 51-7179
Clone: eBio64DEC17
Concentration: 5 µl (0.03 µg)/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.
LOT **Batch Code:** Refer to Vial
Use By: Refer to Vial
Caution, contains Azide

Description

The eBio64DEC17 antibody reacts with human IL-17A. The eBio64DEC17 antibody is a neutralizing antibody. Interleukin-17A (IL-17A) is a CD4+ T cell-derived cytokine that promotes inflammatory responses in cell lines and is elevated in rheumatoid arthritis, asthma, multiple sclerosis, psoriasis, and transplant rejection. The cDNA encoding human IL-17A was isolated from a library of CD4+ T cells; the encoded protein exhibits 72 percent amino acid identity with HVS13 , an open reading frame from a T lymphotropic Herpesvirus saimiri, and 63 percent with mouse CTLA-8 (cytotoxic T-lymphocyte associated antigen-8). Human IL-17A exists as glycosylated 20-30 kD homodimers. High levels of IL-17A homodimer are produced by activated peripheral blood CD4+ T-cells. IL-17A enhances expression of the intracellular adhesion molecule-1 (ICAM-1) in human fibroblasts. Human IL-17A also stimulates epithelial, endothelial, or fibroblastic cells to secrete IL-6, IL-8, G-CSF, and PGE2. In the presence of human IL-17A, fibroblasts can sustain the proliferation of CD34+ hematopoietic progenitors and induce maturation into neutrophils. Mouse, rat, and human IL-17A can induce IL-6 secretion in mouse stromal cells, indicating that all homologs can recognize the mouse IL-17A receptor.

IL-23-dependent, IL-17A-producing CD4+ T cells (Th-17 cells) have been identified as a unique subset of Th cells that develops along a pathway that is distinct from the Th1- and Th2- cell differentiation pathways. The hallmark effector molecules of Th1 and Th2 cells, e.g., IFN-g and IL-4, have each been found to negatively regulate the generation of these Th-17 cells.

Intracellular staining by eBio64DEC17 antibody identifies the same cell population as the eBio64CAP17 antibody, as can be seen in co-staining experiments using both antibodies. Click here for link to data 51-7179.

Applications Reported

The eBio64DEC17 antibody has been reported for use as the detection antibody in human IL-17A ELISA and ELISPOT assays, as well as for neutralization and intracellular staining.

Applications Tested

This eBio64DEC17 antibody has been pre-titrated and tested by intracellular staining and flow cytometric analysis. This can be used at 5 µl (0.03 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 10^5 to 10^8 cells/test.

References

Acosta-Rodriguez EV, Napolitani G, et al. 2007. Interleukins 1beta and 6 but not transforming growth factor-beta are essential for the differentiation of interleukin 17-producing human T helper cells. Nat Immunol. 8(9):942-9. (FC, PubMed)

Chen Z, Tato CM, Muul L, Laurence A, O'Shea JJ. Distinct regulation of interleukin-17 in human T helper lymphocytes. Arthritis Rheum.

2007 Sep;56(9):2936-46. (**ebio64Dec17**, FC PubMed)

Related Products

00-8222 IC Fixation Buffer
00-8333 Permeabilization Buffer (10X)
11-0038 Anti-Human CD3 FITC (UCHT1)
12-7169 Anti-Human IL-17F PE (SHLR17)
12-7229 Anti-Human IL-22 PE (22URTI)
51-4714 Mouse IgG1 K Isotype Control Alexa Fluor® 647 (P3.6.2.1)
51-7172 Anti-Mouse IL-17A Alexa Fluor® 647 (To Be Discontinued. Refer to Alternative clone: eBio17B7 cat. 17-7177) (eBioTC11-18H10.1)
51-7219 Anti-Human IL-21 Alexa Fluor® 647 (To Be Discontinued. See NEW Format: eFluor® 660 cat. 50-7219) (eBio3A3-N2 (3A3-N2))
88-7876 Human IL-17A ELISPOT Ready-SET-Go!®
88-8419 Human Th17 Cytokine Staining Panel

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