

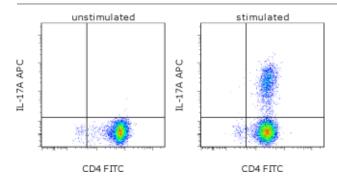
An Affymetrix Company

Anti-Human IL-17A APC

Catalog Number: 17-7179

Also known as: Interleukin-17A, CTLA8

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



CD4-enriched human peripheral blood cells were polarized under Th17 conditions for 10 days. Cells were restimulated with Protein Transport Inhibitor Cocktail (cat. 00-4980) (left) or Cell Stimulation Cocktail plus protein transport inhibitors (cat. 00-4975) (right) for 6 hours. Cells were stained with Fixable Viability Dye eFluor® 450 (cat. 65-0863) followed by intracellular staining with Anti-Human CD4 FITC (cat. 11-0047) and Anti-Human IL-17A APC using the Fixation & Permeabilization Buffers (cat. 88-8823). Viable cells were used for analysis.

Product Information

Contents: Anti-Human IL-17A APC

Clone: eBio64DEC17

Concentration: 5 uL (0.06 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



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 gamma 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.

Applications Reported

This eBio64DEC17 antibody has been reported for use in intracellular staining followed by flow cytometric analysis.

Applications Tested

This eBio64DEC17 antibody has been pre-titrated and tested by intracellular staining and flow cytometric analysis of stimulated normal human peripheral blood cells. This can be used at 5 µL (0.06 µg) per test. A test is defined as the



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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 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

00-4975 Cell Stimulation Cocktail (plus protein transport inhibitors) (500X)

00-4980 Protein Transport Inhibitor Cocktail (500X)

12-0047 Anti-Human CD4 PE (SK3 (SK-3))

12-7169 Anti-Human IL-17F PE (SHLR17)

12-7219 Anti-Human IL-21 PE (eBio3A3-N2 (3A3-N2))

16-0039 Anti-Human CD3 Functional Grade Purified (HIT3a)

16-0289 Anti-Human CD28 Functional Grade Purified (CD28.2)

17-4714 Mouse IgG1 K Isotype Control APC (P3.6.2.8.1)

88-8419 Human Th17 Cytokine Staining Panel

88-8823 Fixation & Permeabilization Buffers