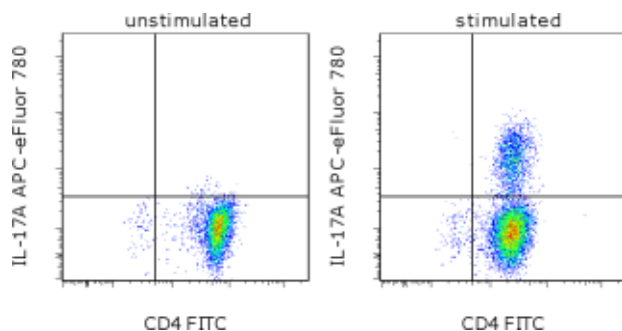


Anti-Human IL-17A APC-eFluor[®] 780

Catalog Number: 47-7179

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-eFluor[®] 780 using the Fixation & Permeabilization Buffers (cat. 88-8823). Viable cells were used for analysis.

Product Information

Contents: Anti-Human IL-17A APC-eFluor[®] 780

REF **Catalog Number:** 47-7179

Clone: eBio64DEC17

Concentration: 5 uL (0.125 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. This tandem dye is sensitive to photo-induced oxidation. Protect this vial from light during storage, handling & experimental procedures.

Batch Code: Refer to vial

Use By: Refer to vial

Contains sodium azide



LOT



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.

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Catalog Number: 47-7179

Also known as: Interleukin-17A, CTLA8

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Applications Tested

This eBio64DEC17 antibody has been pre-titrated and tested by intracellular flow cytometric analysis of stimulated human peripheral blood cells. This can be used at 5 μ L (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 10^5 to 10^8 cells/test.

APC-eFluor[®] emits at 780 nm and is excited with the Red laser (633 nm). Please make sure that your instrument is capable of detecting this fluorochoime.

Light sensitivity: Tandem is sensitive photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 μ L cell sample + 100 μ L IC Fixation Buffer) or 1-step Fix/Lyse Solution (cat. 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency/compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

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)
11-0047 Anti-Human CD4 FITC (SK3 (SK-3))
12-7169 Anti-Human IL-17F PE (SHLR17)
12-7219 Anti-Human IL-21 PE (eBio3A3-N2 (3A3-N2))
50-7229 Anti-Human IL-22 eFluor[®] 660 (Alexa Fluor[®] 647 Replacement) (22URTI)
65-0863 Fixable Viability Dye eFluor[®] 450
88-8419 Human Th17 Cytokine Staining Panel
88-8823 Fixation & Permeabilization Buffers

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