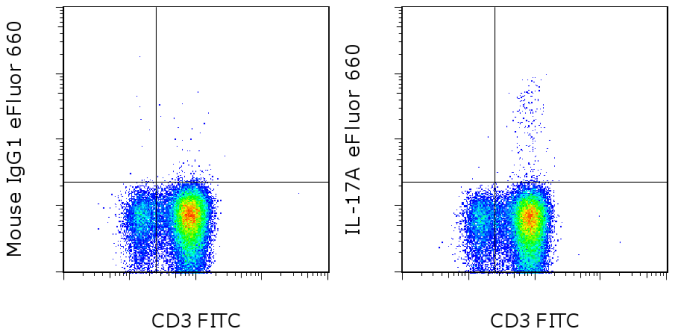
# Anti-Human IL-17A eFluor® 660 (Alexa® 647 Replacement)

**Catalog Number:** 50-7179
**Also known as:** Interleukin-17A
**RUO: For Research Use Only. Not for use in diagnostic procedures.**




Intracellular staining of normal human peripheral blood cells stimulated with Cell Stimulation Cocktail (plus protein transport inhibitors) (500X) (cat. 00-4975) for 5 hours with Anti-Human CD3 FITC (cat. 11-0037) and Mouse IgG1 K Isotype Control eFluor® 660 (cat. 50-4714) (left) or Anti-Human IL-17A eFluor® 660 (right). Cells were fixed and permeabilized using the IC Fixation Buffer (cat. 00-8222) and Permeabilization Buffer (10X) (cat. 00-8333). Cells in the lymphocyte gate were used for analysis.

## Product Information

**Contents:** Anti-Human IL-17A eFluor® 660 (Alexa® 647 Replacement)
REF **Catalog Number:** 50-7179
**Clone:** eBio64DEC17
**Concentration:** 5 uL (0.03 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.
LOT **Batch Code:** Refer to vial
**Use By:** Refer to vial
**Contains sodium 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 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 (0.03 µg) per test. A test is defined as the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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 $10^5$ to $10^8$ cells/test.

**eFluor® 660 is a replacement for Alexa Fluor® 647. eFluor® 660 emits at 659 nm and is excited with the red laser (633 nm). Please make sure that your instrument is capable of detecting this fluorochome.**

**References**

Lee JJ, Chang YL, Lai WL, Ko JY, Kuo MY, Chiang CP, Azuma M, Chen CW, Chia JS. Increased prevalence of interleukin-17-producing CD4(+) tumor infiltrating lymphocytes in human oral squamous cell carcinoma. Head Neck. 2011 Sep;33(9):1301-8 (ebio64DEC17m IHC frozen)

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)
00-8222 IC Fixation Buffer
00-8333 Permeabilization Buffer (10X)
11-0037 Anti-Human CD3 FITC (OKT3)
12-7219 Anti-Human IL-21 PE (eBio3A3-N2 (3A3-N2))
12-7229 Anti-Human IL-22 PE (22URTI)
12-9179 Anti-Human IL-17AF PE
46-7169 Anti-Human IL-17F PerCP-eFluor® 710 (SHLR17)
50-4714 Mouse IgG1 K Isotype Control eFluor® 660 (P3.6.2.8.1)


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