

# IL-17A Monoclonal Antibody (eBio64DEC17), APC-eFluor 780, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Published Species	Hamster, Human, Rhesus monkey
Host/Isotope	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), APC-eFluor 780, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	eBio64DEC17
Conjugate	APC-eFluor® 780
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.1% gelatin, 0.2% BSA
Contains	0.09% sodium azide
Storage Conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_11043559

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.125 µg)/test	15 Publications

## Product Specific Information

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 flow cytometric analysis of stimulated human peripheral blood cells. This can be used at 5  $\mu$ L (0.125  $\mu$ g) per test. A test is defined as the amount ( $\mu$ g) of antibody that will stain a cell sample in a final volume of 100  $\mu$ L. Cell number should be determined empirically but can range from  $10^5$  to  $10^8$  cells/test.

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

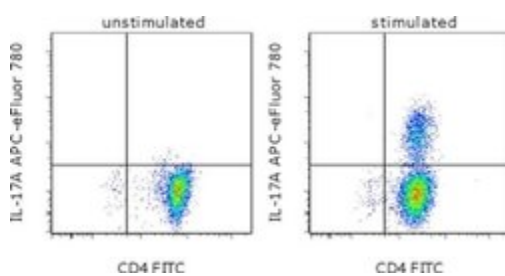
**Light sensitivity:** This tandem is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

**Fixation:** Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100  $\mu$ L cell sample + 100  $\mu$ 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.

**Excitation:** 633-647 nm; **Emission:** 780 nm; **Laser:** Red Laser.

**Filtration:** 0.2  $\mu$ m post-manufacturing filtered.

## Product Images For IL-17A Monoclonal Antibody (eBio64DEC17), APC-eFluor 780, eBioscience™



### IL-17A Antibody (47-7179-42) in Flow

CD4-enriched human peripheral blood cells were polarized under Th17 conditions (with Human IL-23 Recombinant Protein (Product # 14-8239-63) for 10 days. Cells were restimulated with Protein Transport Inhibitor Cocktail (Product # 00-4980-03) (left) or Cell Stimulation Cocktail plus protein transport inhibitors (Product # 00-4975-03) (right) for 6 hours. Cells were stained intracellularly with Anti-Human CD4 FITC (Product # 11-0047-42) and Anti-Human IL-17A APC-eFluor® 780 using the Intracellular Fixation and Permeabilization Buffer Set (Product # 88-8824-00). Viable cells, as determined by Fixable Viability Dye eFluor® 450 (Product # 65-0863-14), were used for analysis.

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## Flow Cytometry (15)

Frontiers in immunology

### CD16<sup>+</sup> Monocyte Subset Was Enriched and Functionally Exacerbated in Driving T-Cell Activation and B-Cell Response in Systemic Lupus Erythematosus.

"Published figure using IL-17A monoclonal antibody (Product # 47-7179-42) in Flow Cytometry"

Authors: Zhu H,Hu F,Sun X,Zhang X,Zhu L,Liu X,Li X,Xu L,Shi L,Gan Y,Su Y

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2019

Oncology letters

### Accumulation of T-helper 22 cells, interleukin-22 and myeloid-derived suppressor cells promotes gastric cancer progression in elderly patients.

"Published figure using IL-17A monoclonal antibody (Product # 47-7179-42) in Flow Cytometry"

Authors: Chen X,Wang Y,Wang J,Wen J,Jia X,Wang X,Zhang H

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2018

[View more Flow references on thermofisher.com](#)

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