

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

Product Details	
Size	100 Tests
Species Reactivity	Human
Published Species	Hamster, Human, Rhesus monkey
Host/Isotype	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
Excitation/Emission Max	756/785 nm
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 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	24 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 µL (0.125 µg) per test. A test is defined as the 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<sup>5</sup> to 10<sup>8</sup> 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.

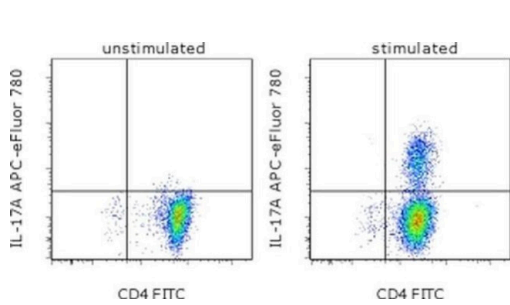
Light sensitivity: This tandem is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

**Fixation:** Samples can be stored in IC Fixation Buffer (Product # 00-8222-49) (100 µL cell sample + 100 µL IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 00-5333-57) 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 µm 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 & 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.

**View more figures on [thermofisher.com](https://thermofisher.com)**

Flow Cytometry (24)

<p>International journal of molecular sciences</p> <p><b>Engineered Human Dendritic Cell Exosomes as Effective Delivery System for Immune Modulation.</b></p> <p>"47-7179-42 was used in Flow cytometry/Cell sorting to report in a mouse model of periodontitis that custom murine DC-derived exo subtypes could reprogram the immune response toward a bone-sparing or bone-loss phenotype, depending on immune profile."</p> <p>Authors: Elsayed R,Elashiry M,Tran C,Yang T,Carroll A,Liu Y,Hamrick M,Cutler CW</p>	<p>Year 2023</p> <p>Species Human</p>
<p>American journal of ophthalmology</p> <p><b>Antigen-Specific Intraocular Cytokine Responses Distinguish Ocular Tuberculosis From Undifferentiated Uveitis in Tuberculosis-Immunoreactive Patients.</b></p> <p>"47-7179-42 was used in Flow cytometry/Cell sorting to show that the intraocular polyfunctional cytokine response is stronger in undifferentiated TST+ uveitis than in OTB patients, likely representing an exaggerated anti-TB immune response rather than active infection."</p> <p>Authors: Alam K,Sharma G,Forrester JV,Basu S</p>	<p>Year 2023</p> <p>Species Human</p>

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

More applications with references on thermofisher.com

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.