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

#### Product Details

Size	100 Tests
Species Reactivity	Human
Published Species	Fungi, Mouse, Human, Rhesus monkey
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), APC, eBioscience™
Class	Monoclonal
Туре	Antibody
Clone	eBio64DEC17
Conjugate	APC
Excitation/Emission Max	651/660 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_1582221

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 μL (0.06 μg)/test	27 Publications
Functional Assay (Functional)	-	1 Publication

#### **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.^M

ΛM

^M

^M

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.^M

1

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.^M ^M

Applications Reported: This eBio64DEC17 antibody has been reported for use in intracellular staining followed by flow cytometric analysis.^M ^M

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  $\mu$ L (0.06  $\mu$ 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.^M

Excitation: 633-647 nm; Emission: 660 nm; Laser: Red Laser.^M

^M

ΛM

Filtration: 0.2 µm post-manufacturing filtered.

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



#### IL-17A Antibody (17-7179-42) 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 intracellularly stained with Anti-Human CD4 FITC (Product # 11-0047-42) and Anti-Human IL-17A APC 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.

#### Flow Cytometry (27)

#### iScience

# Post-transplant cyclophosphamide prevents xenogeneic graft-versushost disease while depleting proliferating regulatory T cells.

"17-7179-42 was used in Flow cytometry/Cell sorting to demonstrated that highly xenoreactive T-cell clones were depleted by PTCy. Although Treg frequencies were significantly higher in PTCy-treated than in control mice on day 21, xGVHD attenuation by PTCy was not abrogated by Treg depletion."

Authors: Ritacco C,Köse MC,Courtois J,Canti L,Beguin C,Dubois S,Vandenhove B,Servais S,Caers J,Beguin Y,Ehx G, Baron F

Nature immunology Fungal sensing by dectin-1 directs the non-pathogenic polarization of T <sub>H</sub>	<b>Year</b> 2022
17 cells through balanced type I IFN responses in human DCs.	
"17-7179-42 was used in Flow Cytometry /test) to show that dectin-1-mediated modulation of type I IFN responses allowed TGF- activation and non-pathogenic TH17 cell development during fungal infections in humans."	Dilution
Authors: Gringhuis SI,Kaptein TM,Remmerswaal EBM,Drewniak A,Wevers BA,Theelen B,D'Haens GRAM,Boekhout T, Geijtenbeek TBH	1:25

View more Flow references on thermofisher.com

**Year** 2023

Species Mouse

# Functional Assay (1)

PloS one	Year	
Tumour cell generation of inducible regulatory T-cells in multiple		
myeloma is contact-dependent and antigen-presenting cell-independent.		
"17-7179 was used in Immunofluorescence to provide further evidence of direct tumour manipulation of the immune system to augment immune evasion and propagation of the malignant cell clone."	Human	
Authors: Feyler S,Scott GB,Parrish C,Jarmin S,Evans P,Short M,McKinley K,Selby PJ,Cook G		

## 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, EXERCISS OR IMPLED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLED WARRANTIES OF MECHANTABILITY. TITNESS FOR ANATCILLAR PURPESS, OR NON-NERINGERENT. 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 THE OND-CONFORMING PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (III) MISUSE, FAULT OR NEGLICENCE 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. IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. UNders otherwise expressly stated on the Product on in the documentation accompanying 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 consum