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
Type	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

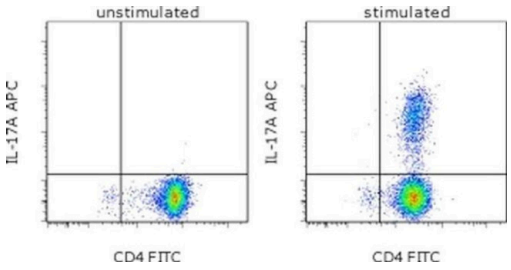
Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.06 µg)/test	27 Publications
Functional Assay (Functional)	-	1 Publication

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
^M
^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
^M

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 µL (0.06 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 10^5 to 10^8 cells/test.^M
^M
Excitation: 633-647 nm; Emission: 660 nm; Laser: Red Laser.^M
^M
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.

28 References

Flow Cytometry (27)

iScience

Post-transplant cyclophosphamide prevents xenogeneic graft-versus-host 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

Year
2023

Species
Mouse

Nature immunology

Fungal sensing by dectin-1 directs the non-pathogenic polarization of T_H 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."

Authors: Gringhuis SI,Kaptein TM,Remmerswaal EBM,Drewniak A,Wevers BA,Theelen B,D'Haens GRAM,Boekhout T, Geijtenbeek TBH

Year
2022

Species
Fungi

Dilution
1:25

View more Flow references on thermofisher.com

Functional Assay (1)

PloS one

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."

Authors: Feyler S,Scott GB,Parrish C,Jarmin S,Evans P,Short M,McKinley K,Selby PJ,Cook G

Year
2012

Species
Human

More applications with references on thermofisher.com