



IL-17A Monoclonal Antibody (eBio64DEC17), PE-eFluor™ 610, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Published Species	Non-human primate, Hamster, Human, Rhesus monkey
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), PE-eFluor™ 610, eBioscience™
Class	Monoclonal
Туре	Antibody
Clone	eBio64DEC17
Conjugate	PE-eFluor™ 610
Excitation/Emission Max	565/606 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_2574658

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 μL (0.25 μg)/test	20 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 staining and flow cytometric analysis of stimulated normal human peripheral blood cells using the Intracellular Fixation and Permeabilization Buffer Set (cat. 88-8824) and protocol. Please refer to Best Protocols: Protocol A: Two step protocol for (cytoplasmic) intraceelular proteins located under the Resources Tab online. This can be used at 5 μ L (0.25 μ g) per test. A test is defined as the amount (μ g) of antibody that will stain a cell sample in a final volume of 100 μ L. Cell number should be determined empirically but can range from 10^5 to 10^8 cells/test.

PE-eFluor® 610 can be excited with laser lines from 488-561 nm and emits at 607 nm. We recommend using a 610/20 band pass filter (equivalent to PE-Texas Red®). Please make sure that your instrument is capable of detecting this fluorochome.

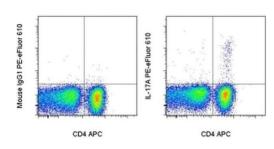
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 μ L of cell sample + 100 μ L of 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: 488-561 nm; Emission: 607 nm; Laser: Blue Laser, Green Laser, Yellow-Green Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For IL-17A Monoclonal Antibody (eBio64DEC17), PE-eFluor™ 610, eBioscience™



IL-17A Antibody (61-7179-42) in Flow

Normal human peripheral blood lymphocytes were stimulated with Cell Stimulation Cocktail (Product # 00-4975-03) in the presence of Protein Transport Inhibitor Cocktail (Product # 00-4980-03). Cells were fixed and stained intracellularly with Anti-Human CD4 APC (Product # 17-0049-42) and Mouse IgG1 K Isotype Control PE-eFluor® 610 (Product # 61-4714-82) (left) or Anti-Human IL-17A PE-eFluor® 610 (right) using the Fixation and Permeabilization Buffers set (Product # 88-8824-00). Viable cells the lymphocyte gate, as determined by Fixable Viability Dye eFluor® 450 (Product # 65-0863-14), were used for analysis.

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□ 20 References

Flow Cytometry (20)

PloS one

Small molecule allosteric inhibitors of RORt block Th17-dependent inflammation and associated gene expression in vivo.

Year 2021

"Published figure using IL-17A monoclonal antibody (Product # 61-7179-42) in Flow Cytometry"

Authors: Saenz SA,Local A,Carr T,Shakya A,Koul S,Hu H,Chourb L,Stedman J,Malley J,D'Agostino LA, Shanmugasundaram V,Malona J,Schwartz CE,Beebe L,Clements M,Rajaraman G,Cho J,Jiang L,Dubrovskiy A,Kreilein M,Shimanovich R,Hamann LG,Escoubet L,Ellis JM

JCI insight

YY1 regulation by miR-124-3p promotes Th17 cell pathogenicity through interaction with T-bet in rheumatoid arthritis.

"Published figure using IL-17A monoclonal antibody (Product # 61-7179-42) in Flow Cytometry" Authors: Lin J,Tang J,Lin J,He Y,Yu Z,Jiang R,Yang B,Ou Q

Year 2021

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More applications with references on thermofisher.com

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