

IL-17A Monoclonal Antibody (eBio17B7), PerCP-Cyanine5.5, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse, Rat
Published Species	Rat, Mouse
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), PerCP-Cyanine5.5, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	eBio17B7
Conjugate	PerCP-Cyanine5.5
Excitation/Emission Max	489/679 nm
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_925753

Applications	Tested Dilution	Publications
Immunohistochemistry (Paraffin) (IHC (P))	-	1 Publication
Flow Cytometry (Flow)	0.03 µg/test	104 Publications
Functional Assay (FN)	-	1 Publication

Product Specific Information

Description: The eBio17B7 antibody reacts with mouse and rat IL-17A with no recognition of IL-17F. 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.

Applications Reported: This eBio17B7 antibody has been reported for use in intracellular staining followed by flow cytometric analysis.

Applications Tested: This eBio17B7 antibody has been tested by intracellular staining and flow cytometric analysis of restimulated, Th17-polarized splenocytes using the intracellular Fixation and Permeabilization Buffer Set (Product # 88-8824-00) and protocol. This can be used at less than or equal to 0.03 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 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Staining has been successfully done using the Foxp3 buffer system ((Product # 00-5523)).

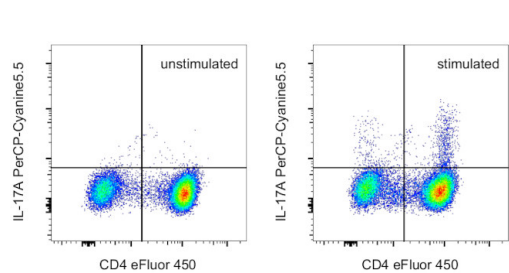
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222) (100 µL of cell sample + 100 µL of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 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 nm; **Emission:** 695 nm; **Laser:** Blue Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For IL-17A Monoclonal Antibody (eBio17B7), PerCP-Cyanine5.5, eBioscience™



IL-17A Antibody (45-7177-82) in Flow
BALB/c mouse splenocytes were polarized under Th17 conditions (with mouse IL-6 Recombinant Protein (Product # 29-8061-65 and TGF beta (Product # 14-8342-82)) for 7 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 5 hours. Cells were then stained intracellularly, using the Intracellular Fixation & Permeabilization Buffer Set (Product # 88-8824-00) and protocol, with CD4 Monoclonal Antibody, eFluor 450 (Product # 48-0042-82) and 0.03 µg of IL-17A Monoclonal Antibody, PerCP-Cyanine5.5. Total cells were used for analysis.

View more figures on thermofisher.cn

Immunohistochemistry (Paraffin) (1)

BMC immunology

Role of epithelial integrin-linked kinase in promoting intestinal inflammation: effects on CCL2, fibronectin and the T cell repertoire.

Authors: Assi K,Patterson S,Dedhar S,Owen D,Levings M,Salh B

Year
2011

Flow Cytometry (104)

Therapeutic advances in chronic disease

Prevention of EAE by tolerogenic vaccination with PEGylated antigenic peptides.

"Published figure using IL-17A monoclonal antibody (Product # 45-7177-82) in Flow Cytometry"

Authors: Pfeil J,Simonetti M,Lauer U,von Thülen B,Durek P,Poulsen C,Pawlowska J,Kröger M,Krähmer R,Leenders F, Hoffmann U,Hamann A

Year
2023

Cell communication and signaling : CCS

SARS-CoV-2 spike protein promotes inflammatory cytokine activation and aggravates rheumatoid arthritis.

"Published figure using IL-17A monoclonal antibody (Product # 45-7177-82) in Flow Cytometry"

Authors: Lee AR,Woo JS,Lee SY,Lee YS,Jung J,Lee CR,Park SH,Cho ML

Year
2023

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

Functional Assay (1)

International immunopharmacology

Anti-IL-23 antibody blockade of IL-23/IL-17 pathway attenuates airway obliteration in rat orthotopic tracheal transplantation.

Authors: Cao H,Lan Q,Shi Q,Zhou X,Liu G,Liu J,Tang G,Qiu C,Qiu C,Xu J,Fan H,Liu Z

Year
2011

More applications with references on thermofisher.cn

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