

IL-17A Monoclonal Antibody (eBio17B7), FITC, eBioscience™

Product Details	
Size	50 µg
Species Reactivity	Mouse, Rat
Published Species	Rat, Mouse, Human
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), FITC, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	eBio17B7
Conjugate	FITC
Excitation/Emission Max	498/517 nm
Form	Liquid
Concentration	0.5 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_763581

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	6 Publications
Immunohistochemistry (Paraffin) (IHC (P))	Assay-Dependent	1 Publication
Flow Cytometry (Flow)	0.25 µg/test	106 Publications
ELISA (ELISA)	-	3 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.

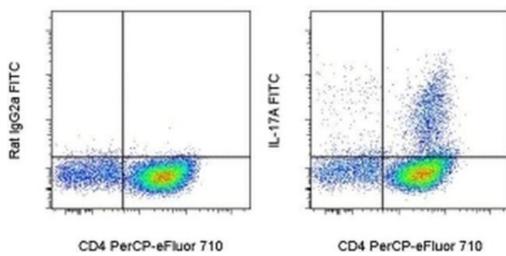
Applications Tested: This eBio17B7 antibody has been tested by intracellular staining and flow cytometric analysis of restimulated, Th17-polarized splenocytes using the intracellular Fixation and Permeabilization Buffer Set (cat. 88-8824) and protocol. This can be used at less than or equal to 0.25 µg 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/Transcription Factor Staining Buffer Set (cat. 00-5523) and protocol.

Excitation: 488 nm; Emission: 520 nm; Laser: Blue Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For IL-17A Monoclonal Antibody (eBio17B7), FITC, eBioscience™



IL-17A Antibody (11-7177-81) in Flow

Splenocytes were cultured under Th17-polarizing conditions for 6 days and then restimulated with the Cell Stimulation Cocktail (plus protein transport inhibitors) (Product # 00-4975-03) for 5 hours. Cells were intracellularly stained with Anti-Mouse CD4 PerCP-eFluor® 710 (Product # 46-0042-82) and 0.125 µg of Rat IgG2a K Isotype Control FITC (Product # 11-4321-42) (left) or 0.125 µg of Anti-Mouse/Rat IL-17A FITC (right) using the Intracellular Fixation & Permeabilization Buffer Set (Product # 88-8824-00) and protocol. Viable cells, as determined by Fixable Viability Dye eFluor® 660 (Product # 65-0864-14), in the lymphocyte gate were used for analysis.

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

117 References

Immunohistochemistry (6)

Mediators of inflammation

The Severity of CVB3-Induced Myocarditis Can Be Improved by Blocking the Orchestration of NLRP3 and Th17 in Balb/c Mice.

"Published figure using IL-17A monoclonal antibody (Product # 11-7177-81) in Immunohistochemistry"

Authors: Chen J, Yang F, Shi S, Liu X, Qin F, Wei X, Huang Y, Liang W, Miao L

Year
2021

International journal of molecular sciences

Positive Effects of Oral Antibiotic Administration in Murine Chronic Graft-Versus-Host Disease.

"Published figure using IL-17A monoclonal antibody (Product # 11-7177-81) in Immunohistochemistry"

Authors: Sato S, Shimizu E, He J, Ogawa M, Asai K, Yazu H, Rusch R, Yamane M, Yang F, Fukuda S, Kawakami Y, Tsubota K, Ogawa Y

Year
2021

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

Immunohistochemistry (Paraffin) (1)

BMC immunology

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

"Published figure using IL-17A monoclonal antibody (Product # 11-7177-81) in Immunofluorescence"

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

Year
2011

Flow Cytometry (106)

Therapeutic advances in chronic disease

Prevention of EAE by tolerogenic vaccination with PEGylated antigenic peptides.

"Published figure using IL-17A monoclonal antibody (Product # 11-7177-81) 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

Species
Mouse

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

More applications with references on thermofisher.com

ELISA (3) **FN (1)**

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.