

IL-17A Monoclonal Antibody (eBio17B7), eFluor™ 450, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse, Rat
Published Species	Mouse
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), eFluor™ 450, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	eBio17B7
Conjugate	eFluor™ 450
Excitation/Emission Max	405/445 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_11149503

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	5 Publications
Immunohistochemistry (Paraffin) (IHC (P))	-	1 Publication
Flow Cytometry (Flow)	0.25 µg/test	78 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 mouse 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.

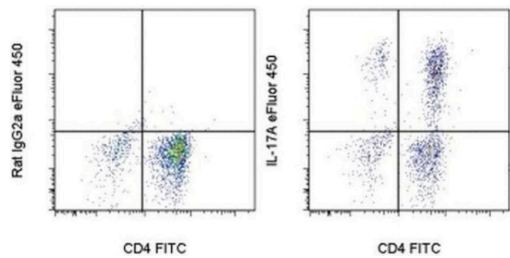
Staining has been successfully done using the Foxp3 buffer system (cat 00-5523).

eFluor® 450 is an alternative to Pacific Blue®. eFluor® 450 emits at 445 nm and is excited with the Violet laser (405 nm). Please make sure that your instrument is capable of detecting this fluorochoime.

Excitation: 405 nm; Emission: 445 nm; Laser: Violet Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For IL-17A Monoclonal Antibody (eBio17B7), eFluor™ 450, eBioscience™



IL-17A Antibody (48-7177-82) in Flow
Intracellular staining of 10-day Th17-polarized mouse splenocytes stimulated with Cell Stimulation Cocktail (plus protein transport inhibitors) (500X) (Product # 00-4975-03) with Anti-Mouse CD4 FITC (Product # 11-0042-82) and 0.125 µg of Rat IgG2a K Isotype Control (Product # 48-4321-82) (left) or 0.125 µg of Anti-Mouse /Rat IL-17A eFluor® 450 (right) using the Intracellular Fixation & Permeabilization Buffer Set (Product # 88-8824-00) and protocol. Viable cells, as determined by Fixable Viability Dye eFluor® 780 (Product # 65-0865-14), were used for analysis.

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Immunohistochemistry (5)

<p>Mediators of inflammation</p> <p>The Severity of CVB3-Induced Myocarditis Can Be Improved by Blocking the Orchestration of NLRP3 and Th17 in Balb/c Mice.</p> <p>"Published figure using IL-17A monoclonal antibody (Product # 48-7177-82) in Immunohistochemistry"</p> <p>Authors: Chen J,Yang F,Shi S,Liu X,Qin F,Wei X,Huang Y,Liang W,Miao L</p>	<p>Year 2021</p>
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<p>International journal of molecular sciences</p> <p>Positive Effects of Oral Antibiotic Administration in Murine Chronic Graft-Versus-Host Disease.</p> <p>"Published figure using IL-17A monoclonal antibody (Product # 48-7177-82) in Immunohistochemistry"</p> <p>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</p>	<p>Year 2021</p>
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Immunohistochemistry (Paraffin) (1)

<p>BMC immunology</p> <p>Role of epithelial integrin-linked kinase in promoting intestinal inflammation: effects on CCL2, fibronectin and the T cell repertoire.</p> <p>Authors: Assi K,Patterson S,Dedhar S,Owen D,Levings M,Salh B</p>	<p>Year 2011</p>
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Flow Cytometry (78)

<p>Therapeutic advances in chronic disease</p> <p>Prevention of EAE by tolerogenic vaccination with PEGylated antigenic peptides.</p> <p>"Published figure using IL-17A monoclonal antibody (Product # 48-7177-82) in Flow Cytometry"</p> <p>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</p>	<p>Year 2023</p>
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More applications with references on thermofisher.com

- ELISA (3)
- FN (1)

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