

IL-17F Monoclonal Antibody (eBio18F10), PE, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse, Human
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), PE, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	eBio18F10
Conjugate	PE
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.1% gelatin
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_1210742

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.5 µg/test	11 Publications

Product Specific Information

Description: The eBio18F10 antibody reacts with mouse IL-17F. IL-17F is a 37 kD homodimer of the IL-17 family and a signature Th17 marker. Of all the six IL-17 family members, IL-17F and IL-17A share the strongest homology (50% amino acid identity), and the two genes are located in the same chromosomal region. Recent studies have demonstrated coordinated regulation of IL-17A and IL-17F during Th17 differentiation. Expression of IL-17F and IL-17A has been detected in activated human peripheral blood lymphocytes, specifically by activated human CD4+ T cells. In addition to IL-17A, differentiated Th17 cells also produce IL-17F and IL-22 upon re-activation. Like IL-17A, IL-17F has been linked with inflammatory diseases. IL-17F and IL-17A expression has been observed in tissue samples from various autoimmune diseases, such as rheumatoid arthritis, multiple sclerosis, psoriasis, inflammatory bowel disease, and asthma. IL-17F treatment of airway epithelium, vein endothelial cells, and fibroblasts has been reported to induce expression of IL-6, IL-8, GRO-alpha, ENA-78, TGF-beta, MCP-1, G-CSF, GM-CSF, and ICAM-1.

Like IL-17A, IL-17F is a disulfide-linked homodimeric glycoprotein. The IL-17F homodimer includes a classical cysteine knot motif, which is found also in the TGF-beta, BMP, and NGF superfamilies. The presence of the cysteine knot motif suggested the possibility of a heterodimeric structure, as was reported for TGF-beta and inhibin/activin. Recent reports confirm that co-expression of IL-17F and IL-17A in HEK293 cells results in the formation of biologically active IL-17F/IL-17A heterodimers, in addition to the IL-17F homodimers and IL-17A homodimers. Moreover, activated human CD4+ T cells were found to produce the IL-17A/F heterodimer, along with the corresponding homodimers. In comparing the relative potency of IL-17A, IL-17F, and IL-17A/F, all three were found to induce GRO-alpha secretion; IL-17A was most potent, followed by IL-17A/F heterodimer, then IL-17F (100-fold lower than IL-17A). In the mouse, the IL-17A/F heterodimer (alone or in synergy with TNF-alpha) was found to regulate the expression of IL-6 and KC (mouse homolog of human GRO-alpha); this was found to be dependent on IL-17RA and TRAF6.

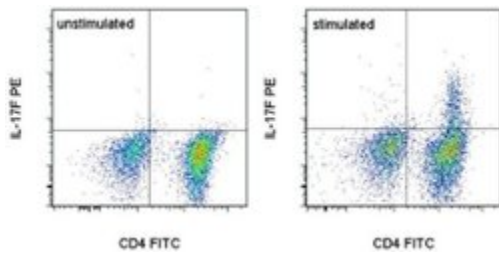
Applications Reported: The eBio18F10 antibody has been reported useful for intracellular staining and flow cytometric analysis.

Applications Tested: The eBio18F10 antibody has been tested by intracellular staining and flow cytometric analysis of in vitro-differentiated mouse Th17 cell cultures. The antibody can be used at less than or equal to 0.5 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.

Excitation: 488-561 nm; Emission: 578 nm; Laser: Blue Laser, Green Laser, Yellow-Green Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For IL-17F Monoclonal Antibody (eBio18F10), PE, eBioscience™



IL-17F Antibody (12-7471-82) in Flow

Ten-day Th17-polarized mouse splenocytes were unstimulated (left) or stimulated with Cell Stimulation Cocktail (plus protein transport inhibitors) (Product # 00-4975-03) (right) for 5 hrs, followed by intracellular staining with Anti-Mouse CD4 FITC (Product # 11-0042-82) and 0.25 µg of Anti-Mouse IL-17F PE. Total viable cells, as determined by Fixable Viability Dye eFluor® 450 (Product # 65-0863-14), were used for analysis.

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

Flow Cytometry (11)

The Journal of clinical investigation

IL-17 and immunologically induced senescence regulate response to injury in osteoarthritis.

"12-7471-82 was used in Flow Cytometry to demonstrate the role of CD8+ T cells and Th17 cells in inhibiting tissue repair in post-injury osteoarthritis."

Authors: Faust HJ,Zhang H,Han J,Wolf MT,Jeon OH,Sadtler K,Peña AN,Chung L,Maestas DR,Tam AJ,Pardoll DM,Campisi J,Housseau F,Zhou D,Bingham CO,Elisseeff JH

Species
Mouse

Dilution
Not Cited

Year
2020

Nature medicine

Thermoneutral housing exacerbates nonalcoholic fatty liver disease in mice and allows for sex-independent disease modeling.

"12-7471 was used in Flow cytometry/Cell sorting to show thermoneutral housing provides a sex-independent model of exacerbated NAFLD in mice and represents a novel approach for interrogation of the cellular and molecular mechanisms underlying disease pathogenesis."

Authors: Giles DA,Moreno-Fernandez ME,Stankiewicz TE,Graspeuntner S,Cappelletti M,Wu D,Mukherjee R,Chan CC, Lawson MJ,Klarquist J,Sünderhauf A,Softic S,Kahn CR,Stemmer K,Iwakura Y,Aronow BJ,Karns R,Steinbrecher KA, Karp CL,Sheridan R,Shanmukhappa SK,Reynaud D,Haslam DB,Sina C,Rupp J,Hogan SP,Divanovic S

Species
Mouse

Dilution
Not Cited

Year
2017

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

More applications with references on thermofisher.com

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.