

Anti-Human IL-17F (MOUSE) Biotin Conjugated Monoclonal Antibody
IL-17F Biotin Conjugated Antibody
Catalog # ASR4900

Specification

Anti-Human IL-17F (MOUSE) Biotin Conjugated Monoclonal Antibody - Product Information

Host	Mouse
Conjugate	Biotin
FP Value	10-20
Target Species	Human
Reactivity	Human
Clonality	Monoclonal
Application	WB, E, I, LCI
Application Note	This purified antibody has been tested for use in Western Blot. Specific conditions for reactivity should be optimized by the end user.
Physical State	Lyophilized
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	Anti-IL-17F (MOUSE) Monoclonal Antibody was produced in mouse by repeated immunizations with mature full length recombinant human IL-17F produced in E.coli followed by hybridoma development.
Reconstitution Volume	100 µL
Reconstitution Buffer	Restore with deionized water (or equivalent)
Stabilizer	10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free
Preservative	0.01% (w/v) Sodium Azide

Anti-Human IL-17F (MOUSE) Biotin Conjugated Monoclonal Antibody - Additional Information

Gene ID 112744

Other Names
112744

Purity

This product was purified from concentrated tissue culture supernate by Protein G chromatography followed by extensive dialysis against the buffer stated above. This antibody is specific for human IL-17F protein. A BLAST analysis was used to suggest cross-reactivity with IL-17F from human sources based on 100% homology with the immunizing sequence. Cross-reactivity with IL-17F from other sources has not been determined.

Storage Condition

Store vial at 4° C prior to restoration. Restore with 0.1 mL of deionized water (or equivalent). For

extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.

Anti-Human IL-17F (MOUSE) Biotin Conjugated Monoclonal Antibody - Protein Information

Name IL17F

Function

Effector cytokine of innate and adaptive immune system involved in antimicrobial host defense and maintenance of tissue integrity (PubMed: 21350122). IL17A-IL17F signals via IL17RA-IL17RC heterodimeric receptor complex, triggering homotypic interaction of IL17RA and IL17RC chains with TRAF3IP2 adapter through SEFIR domains. This leads to downstream TRAF6-mediated activation of NF-kappa-B and MAPkinase pathways ultimately resulting in transcriptional activation of cytokines, chemokines, antimicrobial peptides and matrix metalloproteinases, with potential strong immune inflammation (PubMed: 11574464, PubMed: 11591732, PubMed: 11591768, PubMed: 17911633, PubMed: 18684971, PubMed: 21350122, PubMed: 28827714). IL17A-IL17F is primarily involved in host defense against extracellular bacteria and fungi by inducing neutrophilic inflammation (By similarity). As signature effector cytokine of T-helper 17 cells (Th17), primarily induces neutrophil activation and recruitment at infection and inflammatory sites (By similarity). Stimulates the production of antimicrobial beta-defensins DEFB1, DEFB103A, and DEFB104A by mucosal epithelial cells, limiting the entry of microbes through the epithelial barriers (By similarity). IL17F homodimer can signal via IL17RC homodimeric receptor complex, triggering downstream activation of TRAF6 and NF-kappa-B signaling pathway (PubMed: 32187518). Via IL17RC induces transcriptional activation of IL33, a potent cytokine that stimulates group 2 innate lymphoid cells and adaptive T-helper 2 cells involved in pulmonary allergic response to fungi. Likely via IL17RC, promotes sympathetic innervation of peripheral organs by coordinating the communication between gamma-delta T cells and parenchymal cells. Stimulates sympathetic innervation of thermogenic adipose tissue by driving TGFB1 expression (By similarity). Regulates the composition of intestinal microbiota and immune tolerance by inducing antimicrobial proteins that specifically control the growth of commensal Firmicutes and Bacteroidetes (By similarity).

Cellular Location

Secreted {ECO:0000250|UniProtKB:Q7TNI7}.

Tissue Location

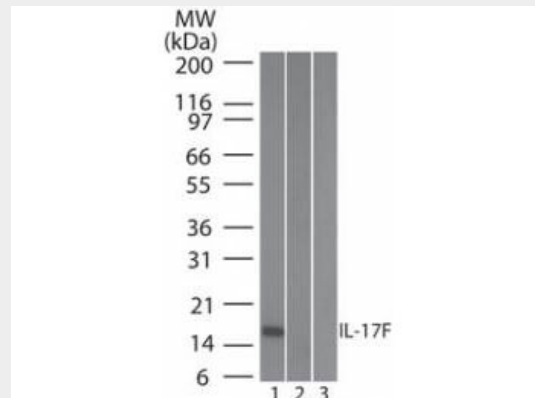
Expressed in T-helper 1 and T-helper 2 cells, basophils and mast cells.

Anti-Human IL-17F (MOUSE) Biotin Conjugated Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-Human IL-17F (MOUSE) Biotin Conjugated Monoclonal Antibody - Images



Western Blot of Mouse Anti-IL-17F antibody. Lane 1: human full length recombinant IL-17F protein. Lane 2: mouse full length recombinant IL-17F protein. Lane 3: rat full length recombinant IL-17F protein. Load: 20 ng/lane. Primary antibody: Anti-IL-17F antibody (209-301-B61) at 0.2ug/mL for overnight at 4°C.

Anti-Human IL-17F (MOUSE) Biotin Conjugated Monoclonal Antibody - Background

Anti-IL-17F recognizes IL-17F (also known as Cytokine ML-1 or Interleukin-24). IL-17F is produced and secreted by CD8+ T cells, NK cells, NKT cells and LTi cells. The main functions of IL-17F are neutrophil recruitment and immunity to extracellular pathogen. More importantly, IL-17F drives inflammation and auto-immunity. IL-17A and IL-17F are by far the best characterized cytokines of the IL-17 cytokine family. IL-17F dimerizes in a parallel fashion similar to nerve growth factor and other neurotrophins. Its dimerization is critical to fulfill its activity. When secreted by activated T cells, IL-17F can stimulate the production of other cytokines such as IL-6, IL-8 granulocyte colony-stimulating factor and, can stimulate cartilage matrix turnover. Defects in IL17F are the cause of familial candidiasis type 6 (CANDF6). CANDF6 is a rare disorder with altered immune responses and impaired clearance of fungal infections, selective against *Candida*. Anti-IL-17E cytokine antibody is ideal for investigators involved in Immunology, Signal Transduction research, Cancer and Inflammatory pathologies.