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Anti-Human IL-17F (MOUSE) Monoclonal Antibody
IL-17F Antibody
Catalog # ASR4885

Specification

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

Host	**Mouse**
Conjugate	**Unconjugated**
Target Species	**Human**
Reactivity	**Human**
Clonality	**Monoclonal**
Application	**WB, IHC, E, I, LCI**
Application Note	**Anti-Human IL-17F antibody has been tested for use in IHC and Western Blot. Specific conditions for reactivity should be optimized by the end user.**
Physical State	**Liquid (sterile filtered)**
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.**
Preservative	**0.01% (w/v) Sodium Azide**

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

Gene ID 112744

Other Names
112744

Purity
Anti-Human IL-17F (MOUSE) Monoclonal Antibody 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 -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. 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.

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Anti-Human IL-17F (MOUSE) 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) 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 Cytomety
- Cell Culture

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

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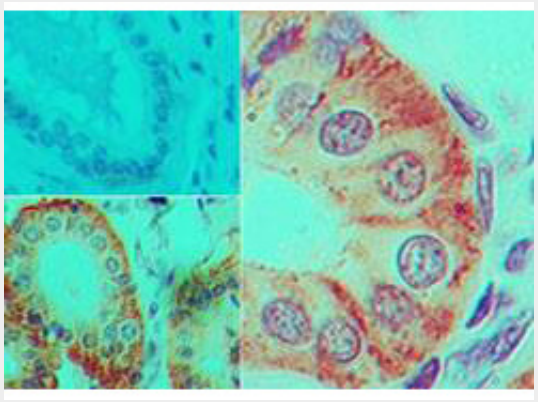

Immunohistochemistry of Mouse Anti-IL-17F antibody. Tissue: human colon tissue. Fixation: formalin-fixed, paraffin-embedded. Primary antibody: isotype control (top left), Mouse Anti-IL-17F antibody (full right and bottom left) at 5 ug/ml.

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

Anti-L-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 neutrophins. 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.