

IL-17F Antibody

Rabbit Polyclonal Antibody Catalog # ABV10834

Specification

IL-17F Antibody - Product Information

Application WB, E
Primary Accession Q96PD4
Reactivity Human
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 18045

IL-17F Antibody - Additional Information

Gene ID 112744

Positive Control Application & Usage ELISA: Recombinant hIL-17F
1) WB: Use 0.1-0.2 μg/ml. The detection limit for recombinant human IL-17F is

1.5-3.0 ng/lane, under either reducing or non-reducing conditions.

2) ELISA: Use 0.5 - 2.0 μg/ml (100 μl/well

antibody solution)

3) Neutralization: To yield one-half maximal inhibition [ND50] of the biological

activity of hIL-17F (50.0 ng/ml), a concentration of 0.9-1.2 μ g/ml of this antibody is required.

Other Names

IL17A/F, IL17 A/F, IL-17A/F, IL-17 A/F, IL17AF, IL-17, AF, Interleukin-17 A/F, Interleukin-17 AF

Target/Specificity IL-17A

Antibody Form Liquid

Appearance Liquid

Formulation

A sterile filtered antibody solution in PBS, pH 7.2.

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage -20 °C



Background Descriptions

Precautions

IL-17F Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

IL-17F 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:115/1404 , 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.

IL-17F Antibody - Protocols

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

- Western Blot
- Blocking Peptides





- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

IL-17F Antibody - Images

IL-17F Antibody - Background

IL-17F, a member of the IL-17 family of structurally related cytokines, has been shown to stimulate proliferation and activation of T-cells and PBMCs. IL-17F also regulates cartilage matrix turnover and inhibits angiogenesis.