

# Anti-Mouse IL-17F (RABBIT) Antibody Peroxidase Conjugated

IL-17F Antibody Peroxidase Conjugated Catalog # ASR5020

# **Specification**

# Anti-Mouse IL-17F (RABBIT) Antibody Peroxidase Conjugated - Product Information

Host Rabbit

Conjugate Peroxidase (Horseradish)

Target Species
Reactivity
Mouse
Clonality
Application
Mouse

Application Note This purified antibody has been tested in

western blotting and suitable in ELISA. By western blot a band approximately 17.9 kDa in size corresponding to mouse IL17-F protein is expected in the appropriate cell lysate or extract. 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 This purified antibody was prepared from

whole rabbit serum produced by repeated

immunizations with full length recombinant mouse IL17-F protein.

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) Gentamicin Sulfate. Do NOT

add Sodium Azide!

# Anti-Mouse IL-17F (RABBIT) Antibody Peroxidase Conjugated - Additional Information

Gene ID 257630

Other Names 257630

# **Purity**

This purified antibody has been heated to 56°C for 30 minutes. In ELISA and other immunoreactive assays, this antibody will recognize both native and recombinant mouse IL17-F in cell supernatants and certain body fluids. A control of similarly diluted normal rabbit IgG is recommended.

### **Storage Condition**

Store vial at 4° C prior to restoration. 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-Mouse IL-17F (RABBIT) Antibody Peroxidase Conjugated - Protein Information

#### Name II17f

#### **Function**

Effector cytokine of innate and adaptive immune system involved in antimicrobial host defense and maintenance of tissue integrity (PubMed: <a href="http://www.uniprot.org/citations/18025225" target=" blank">18025225</a>, PubMed:<a href="http://www.uniprot.org/citations/19144317" target=" blank">19144317</a>, PubMed:<a href="http://www.uniprot.org/citations/23255360" target=" blank">23255360</a>). 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:<a href="http://www.uniprot.org/citations/15477493" target="\_blank">15477493</a>, PubMed: <a href="http://www.uniprot.org/citations/17911633" target="\_blank">17911633</a>, PubMed:<a href="http://www.uniprot.org/citations/18025225" target="blank">18025225</a>). IL17A-IL17F is primarily involved in host defense against extracellular bacteria and fungi by inducing neutrophilic inflammation (PubMed: <a href="http://www.uniprot.org/citations/18025225" target=" blank">18025225</a>, PubMed:<a href="http://www.uniprot.org/citations/23255360" target="blank">23255360</a>). As signature effector cytokine of T-helper 17 cells (Th17), primarily induces neutrophil activation and recruitment at infection and inflammatory sites (PubMed:<a href="http://www.uniprot.org/citations/18025225" target=" blank">18025225</a>). Stimulates the production of antimicrobial beta- defensins DEFB1, DEFB103A, and DEFB104A by mucosal epithelial cells, limiting the entry of microbes through the epithelial barriers (PubMed:<a href="http://www.uniprot.org/citations/19144317" target="blank">19144317</a>). IL17F homodimer can signal via IL17RC homodimeric receptor complex, triggering downstream activation of TRAF6 and NF- kappa-B signaling pathway (PubMed: <a href="http://www.uniprot.org/citations/28813677" target="\_blank">28813677</a>). 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 (PubMed:<a href="http://www.uniprot.org/citations/28813677" target=" blank">28813677</a>). 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 (PubMed:<a href="http://www.uniprot.org/citations/32076265" target=" blank">32076265</a>). Regulates the composition of intestinal microbiota and immune tolerance by inducing antimicrobial proteins that specifically control the growth of commensal Firmicutes and Bacteroidetes (PubMed:<a href="http://www.uniprot.org/citations/29915298" target="blank">29915298</a>).

# **Cellular Location** Secreted.

## **Tissue Location**

Expressed by T-helper 17 cells (Th17) (at protein level). The expression pattern reflects the differentiation state. In fully differentiated Th17 cells, IL17A-IL17F heterodimers are produced at higher levels than IL17A-IL17A and IL17F-IL17F dimers (PubMed:18025225). Dominantly secreted in intestine (PubMed:29915298) Expressed by resident cells of the lamina propria, both epithelial cells and immune cell subsets including natural killer cells, dendritic cells, macrophages and



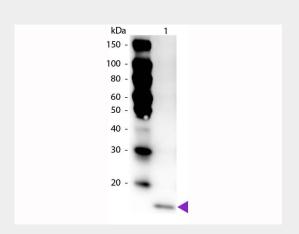
various T and B cell subsets (PubMed:16990136, PubMed:29915298). Expressed by epithelial cells and innate immune cells in the colon (PubMed:19144317). Expressed in group 3 innate lymphoid cells (PubMed:23255360, PubMed:29915298).

# Anti-Mouse IL-17F (RABBIT) Antibody Peroxidase Conjugated - Protocols

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

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

# Anti-Mouse IL-17F (RABBIT) Antibody Peroxidase Conjugated - Images



Western Blot of Peroxidase Conjugated Rabbit anti-IL-17F antibody. Lane 1: Mouse IL-17F. Lane 2: None. Load: 50 ng per lane. Primary antibody: None. Secondary antibody: Peroxidase rabbit secondary antibody at 1:1,000 for 60 min at RT. Block: MB-070 for 30 min at RT. Predicted/Observed size: 16 kDa, 16 kDa for Mouse IL-17F. Other band(s): None.

# Anti-Mouse IL-17F (RABBIT) Antibody Peroxidase Conjugated - Background

IL17-F (also known as ML1, ML-1, IL17F, and IL24) is a cytokine that shares sequence similarity with IL17. This cytokine is expressed by activated T cells, and has been shown to stimulate the production of several other cytokines, including IL6, IL8, and CSF2/GM\_CSF. This cytokine is also found to inhibit the angio-genesis of endothelial cells and induce endothelial cells to produce IL2, TGFB1/ GFB, and monocyte chemoattractant protein-1. IL-17F plays a role in the induction of neutrophilia in the lungs and in the exacerbation of antigen-induced pulmonary allergic inflammation.