

**Anti-Human IL-17A (MOUSE) Monoclonal Antibody**  
**IL-17A Antibody**  
**Catalog # ASR4887****Specification**

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

Host	Mouse
Conjugate	Unconjugated
Target Species	Human
Reactivity	Human
Clonality	Monoclonal
Application	WB, E, I, LCI
Application Note	Anti-Human IL-17A antibody has been tested for use in Western Blot and suitable in FLOW. 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-17A (MOUSE) Monoclonal Antibody was produced in mouse by repeated immunizations with mature full length recombinant human IL-17A produced in E.coli followed by hybridoma development.
Preservative	0.01% (w/v) Sodium Azide

**Anti-Human IL-17A (MOUSE) Monoclonal Antibody - Additional Information****Gene ID** 3605**Other Names**  
3605**Purity**

Anti-Human IL-17A (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-17A protein. A BLAST analysis was used to suggest cross-reactivity with IL-17A from human sources based on 100% homology with the immunizing sequence. Cross-reactivity with IL-17A 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.

## Anti-Human IL-17A (MOUSE) Monoclonal Antibody - Protein Information

**Name** IL17A

**Synonyms** CTLA8, IL17

### 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/24120361" target="\_blank">24120361</a>). Signals via IL17RA-IL17RC heterodimeric receptor complex, triggering homotypic interaction of IL17RA and IL17RC chains with TRAF3IP2 adapter. 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/17911633" target="\_blank">17911633</a>, PubMed:<a href="http://www.uniprot.org/citations/18684971" target="\_blank">18684971</a>, PubMed:<a href="http://www.uniprot.org/citations/19825828" target="\_blank">19825828</a>, PubMed:<a href="http://www.uniprot.org/citations/21350122" target="\_blank">21350122</a>, PubMed:<a href="http://www.uniprot.org/citations/24120361" target="\_blank">24120361</a>, PubMed:<a href="http://www.uniprot.org/citations/8676080" target="\_blank">8676080</a>). Plays an important role in connecting T cell-mediated adaptive immunity and acute inflammatory response to destroy extracellular bacteria and fungi. As a signature effector cytokine of T-helper 17 cells (Th17), primarily induces neutrophil activation and recruitment at infection and inflammatory sites (By similarity). In airway epithelium, mediates neutrophil chemotaxis via induction of CXCL1 and CXCL5 chemokines (By similarity). In secondary lymphoid organs, contributes to germinal center formation by regulating the chemotactic response of B cells to CXCL12 and CXCL13, enhancing retention of B cells within the germinal centers, B cell somatic hypermutation rate and selection toward plasma cells (By similarity). Effector cytokine of a subset of gamma-delta T cells that functions as part of an inflammatory circuit downstream IL1B, TLR2 and IL23A-IL12B to promote neutrophil recruitment for efficient bacterial clearance (By similarity). Effector cytokine of innate immune cells including invariant natural killer cell (iNKT) and group 3 innate lymphoid cells that mediate initial neutrophilic inflammation (By similarity). Involved in the maintenance of the integrity of epithelial barriers during homeostasis and pathogen infection (PubMed:<a href="http://www.uniprot.org/citations/21350122" target="\_blank">21350122</a>). Upon acute injury, has a direct role in epithelial barrier formation by regulating OCLN localization and tight junction biogenesis (By similarity). As part of the mucosal immune response induced by commensal bacteria, enhances host's ability to resist pathogenic bacterial and fungal infections by promoting neutrophil recruitment and antimicrobial peptides release (By similarity). In synergy with IL17F, mediates 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). Involved in antiviral host defense through various mechanisms (By similarity). Enhances immunity against West Nile virus by promoting T cell cytotoxicity (By similarity). May play a beneficial role in influenza A virus (H5N1) infection by enhancing B cell recruitment and immune response in the lung (By similarity). Contributes to influenza A virus (H1N1) clearance by driving the differentiation of B-1a B cells, providing for production of virus- specific IgM antibodies at first line of host defense (By similarity).

### Cellular Location

Secreted

### Tissue Location

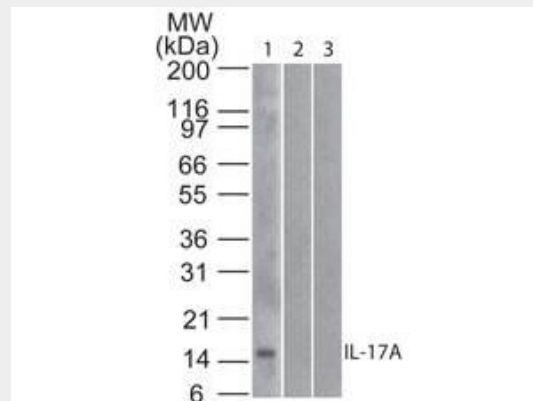
Expressed in memory Th17 cells (at protein level).

## Anti-Human IL-17A (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 Cytometry](#)
- [Cell Culture](#)

#### **Anti-Human IL-17A (MOUSE) Monoclonal Antibody - Images**



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

#### **Anti-Human IL-17A (MOUSE) Monoclonal Antibody - Background**

IL17-A (also known as Interleukin-17) is a proinflammatory cytokine produced by activated T cells. This cytokine regulates the activities of NF-kappaB and mitogen-activated protein kinases. This cytokine can stimulate the expression of IL6 and cyclooxygenase-2 (PTGS2/COX-2), as well as enhance the production of nitric oxide (NO). High levels of this cytokine are associated with several chronic inflammatory diseases including rheumatoid arthritis, psoriasis and multiple sclerosis. IL17-A is the founding member of a group of cytokines called the IL17 family. IL17-A was originally identified as a transcript from a rodent T-cell hybridoma. To elicit its functions, IL17 binds to a type I cell surface receptor called IL17R of which there are at least three variants IL17RA, IL17RB, and IL17RC. Anti-IL-17A antibody is ideal for investigators involved in Immunology research.