

# IL17A Antibody (aa1-75, clone 4K5F6)

Mouse Monoclonal Antibody Catalog # ALS15375

### **Specification**

### IL17A Antibody (aa1-75, clone 4K5F6) - Product Information

Application WB, IHC-P, FC
Primary Accession Q16552
Reactivity Human
Host Mouse
Clonality Monoclonal
Calculated MW 18 KDa
Dilution WB~~1:1000

IHC-P~~N/A FC~~1:10~50

## IL17A Antibody (aa1-75, clone 4K5F6) - Additional Information

#### **Gene ID 3605**

#### **Other Names**

Interleukin-17A, IL-17, IL-17A, Cytotoxic T-lymphocyte-associated antigen 8, CTLA-8, IL17A, CTLA8, IL17

## **Target/Specificity**

Human IL17A / IL-17

### **Reconstitution & Storage**

Store at 4°C for short term applications. For long term storage, aliquot and store at -20°C.

#### **Precautions**

IL17A Antibody (aa1-75, clone 4K5F6) is for research use only and not for use in diagnostic or therapeutic procedures.

## IL17A Antibody (aa1-75, clone 4K5F6) - 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

**Cellular Location** Secreted

**Tissue Location** 

Expressed in memory Th17 cells (at protein level).

at first line of host defense (By similarity).

Volume Array

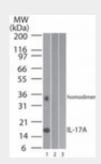
### IL17A Antibody (aa1-75, clone 4K5F6) - Protocols

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

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

IL17A Antibody (aa1-75, clone 4K5F6) - Images





Western blot of IL-17A in 1) human, 2) mouse and 3) rat full-length recombinant IL-17A protein...



Anti-IL-17 antibody IHC of human small intestine.

## IL17A Antibody (aa1-75, clone 4K5F6) - Background

Induces stromal cells to produce proinflammatory and hematopoietic cytokines. Enhances the surface expression of ICAM1/intracellular adhesion molecule 1 in fibroblasts.

## IL17A Antibody (aa1-75, clone 4K5F6) - References

Fossiez F.,et al.J. Exp. Med. 183:2593-2603(1996). Yao Z.,et al.J. Immunol. 155:5483-5486(1995). Mungall A.J.,et al.Nature 425:805-811(2003). Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases. Zhang Z.,et al.Protein Sci. 13:2819-2824(2004).