

#### IL17A Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12918c

#### Specification

## IL17A Antibody (Center) - Product Information

Application	WB,E
Primary Accession	<u>Q16552</u>
Other Accession	<u>Q687Y7, NP_002181.1</u>
Reactivity	Human
Predicted	Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	17504
Antigen Region	61-87

### IL17A Antibody (Center) - 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

This IL17A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 61-87 amino acids from the Central region of human IL17A.

Dilution WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### Precautions

IL17A Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

### IL17A Antibody (Center) - 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:24120361). 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: 19825828, PubMed: 21350122, PubMed: 17911633, PubMed: 18684971, PubMed: 8676080, PubMed:24120361). 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:<u>21350122</u>). 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).

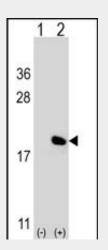
# IL17A Antibody (Center) - Protocols

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

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

## IL17A Antibody (Center) - Images





Western blot analysis of IL17A (arrow) using rabbit polyclonal IL17A Antibody (Center) (Cat. #AP12918c). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the IL17A gene.

# IL17A Antibody (Center) - Background

The protein encoded by this gene 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.

### IL17A Antibody (Center) - References

Chen, X., et al. Cancer Sci. 101(11):2384-2390(2010) Dart, M.L., et al. Circ. Res. 107(9):1106-1116(2010) Marwaha, A.K., et al. J. Immunol. 185(7):3814-3818(2010) Crome, S.Q., et al. J. Immunol. 185(6):3199-3208(2010) Weng, X.M., et al. Zhonghua Shi Yan He Lin Chuang Bing Du Xue Za Zhi 24(1):42-44(2010)