

**Anti-Human IL-17A (RABBIT) Antibody Biotin Conjugated**  
**IL-17A Antibody Biotin Conjugated**  
**Catalog # ASR4963**

**Specification**

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**Anti-Human IL-17A (RABBIT) Antibody Biotin Conjugated - Product Information**

Host	Rabbit
Conjugate	Biotin
Target Species	Human
Reactivity	Human
Clonality	Polyclonal
Application	WB, IHC, E, I, LCI
Application Note	This purified antibody has been tested in western blotting. By western blot a band approximately 30.3 kDa in size corresponding to human IL17-A 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 human IL17-A 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) Sodium Azide

**Anti-Human IL-17A (RABBIT) Antibody Biotin Conjugated - Additional Information**

**Gene ID** 3605

**Other Names**  
3605

**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 human IL17-A 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-Human IL-17A (RABBIT) Antibody Biotin Conjugated - 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

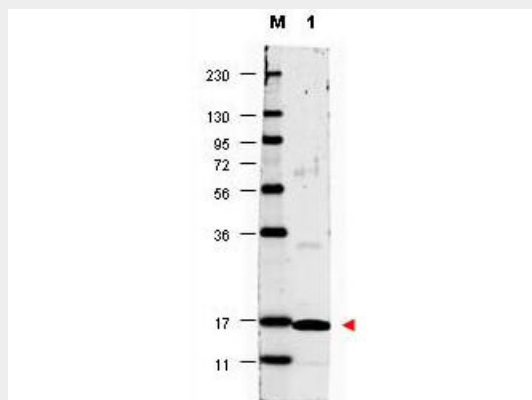
Expressed in memory Th17 cells (at protein level).

### Anti-Human IL-17A (RABBIT) Antibody Biotin Conjugated - 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 (RABBIT) Antibody Biotin Conjugated - Images



Western blot using Rockland's anti-Human IL17-A antibody shows detection of a band ~17 kDa in size corresponding to recombinant human IL17-A (lane 1). Molecular weight markers are also shown (M). After transfer, the membrane was blocked overnight with 3% BSA in TBS followed by reaction with primary antibody at a 1:1,000 dilution. Detection occurred using DyLight 649 conjugated anti-Rabbit IgG (p/n 611-143-122) secondary antibody diluted 1:20,000 in blocking buffer (p/n MB-070). Image was captured using VersaDoc™ MP 4000 imaging system (Bio-Rad).

### Anti-Human IL-17A (RABBIT) Antibody Biotin Conjugated - Background

IL17-A (also known as Interleukin-17, Cytotoxic T-lymphocyte-associated antigen 8 and CTLA-8 in rodents) 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 IL-17 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.