

IL-17A Antibody
Rabbit Polyclonal Antibody
Catalog # ABV10833**Specification**

IL-17A Antibody - Product Information

Application	E
Primary Accession	Q16552
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	17504

IL-17A Antibody - Additional Information**Gene ID** 3605**Positive Control****Application & Usage**

ELISA: Recombinant hIL-17A
IHC: Human breast invasive ductal carcinoma tissue section
1) WB: Use 0.1-0.2 µg/ml. The detection limit for recombinant human IL-17A is 1.5-3.0 ng/lane, under either reducing or non-reducing conditions.
2) ELISA: Use 0.5 - 2.0 µg/ml (100 µl/well antibody solution)
3) Neutralization: To yield one-half maximal inhibition [ND50] of the biological activity of hIL-17A (50.0 ng/ml), a concentration of 0.9-1.3 µg/ml of this antibody is required.
4) Immunohistochemistry: 0.25 µg/ml with an overnight incubation at 4°C.

Other Names

CTLA-8, IL-17, IL-17A, Cytotoxic T-lymphocyte associated antigen 8

Target/Specificity

IL-17A

Antibody Form

Liquid

Appearance

Liquid

Formulation

A sterile filtered antibody solution in PBS, pH 7.2.

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions

Precautions

IL-17A Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

IL-17A 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: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:17911633, PubMed:18684971, PubMed:19825828, PubMed:21350122, PubMed:24120361, PubMed:8676080). 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:21350122). 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

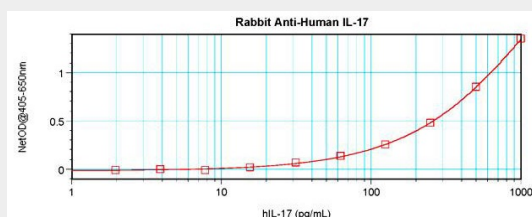
Expressed in memory Th17 cells (at protein level).

IL-17A 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](#)

IL-17A Antibody - Images



To detect hIL-17A by sandwich ELISA (using 100 µl/well antibody solution) a concentration of 0.5 - 2.0 µg/ml of this antibody is required. This antibody allows the detection of at least 0.2 - 0.4 ng/well of recombinant hIL-17A.

IL-17A Antibody - Background

The originally described IL-17 protein, now known as IL-17A, is a homodimer of two 136 amino acid chains, secreted by activated T-cells that act on stromal cells to induce production of proinflammatory and hematopoietic bioactive molecules. Today, IL-17 represents a family of structurally-related cytokines that share a highly conserved C-terminal region but differ from one another in their N-terminal regions and in their distinct biological roles. The six known members of this family, IL-17A through IL-17F, are secreted as homodimers. IL-17A exhibits cross-species bioactivity between human and murine cells.