10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

IL17 Antibody (clone TC11-18H10)

Rat Monoclonal Antibody
Catalog # ALS13687

Specification

IL17 Antibody (clone TC11-18H10) - Product Information

Application	**WB, IHC-P, E, FC**
Primary Accession	Q62386
Reactivity	**Mouse**
Host	**Rat**
Clonality	**Monoclonal**
Dilution	**WB~~1:1000** **IHC-P~~N/A** **E~~N/A** **FC~~1:10~50**

IL17 Antibody (clone TC11-18H10) - Additional Information

Gene ID 16171

Target/Specificity
Recognizes mouse Interleukin 17, a 32kDa disulfide-linked homodimer consisting of two 136 amino acid chains, which belong to the IL-17 family (classified as IL-17A to IL-17F), and signal through the IL-17 receptor (IL-17R/CDw217).

Reconstitution & Storage
Aliquot and store at -20°C. Minimize freezing and thawing.

Precautions
IL17 Antibody (clone TC11-18H10) is for research use only and not for use in diagnostic or therapeutic procedures.

IL17 Antibody (clone TC11-18H10) - 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:18025225, PubMed:19144317, PubMed:26431948). 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/16200068" target="_blank">16200068, PubMed:17911633, PubMed:19144317, PubMed:26431948). 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 (PubMed:18025225). In airway epithelium, mediates neutrophil chemotaxis via induction of CXCL1 and CXCL5 chemokines (PubMed:18025225, PubMed:27923703). 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 (PubMed:18157131). 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 (PubMed:17372004, PubMed:20364087, PubMed:28709803). Effector cytokine of innate immune cells including invariant natural killer cell (iNKT) and group 3 innate lymphoid cells that mediate initial neutrophilic inflammation (PubMed:17470641, PubMed:23255360). Involved in the maintenance of the integrity of epithelial barriers during homeostasis and pathogen infection. Upon acute injury, has a direct role in epithelial barrier formation by regulating OCLN localization and tight junction biogenesis (PubMed:26431948). 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 (PubMed:28709803). 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 (PubMed:19144317). Involved in antiviral host defense through various mechanisms (PubMed:21946434, PubMed:26735852, PubMed:27795421). Enhances immunity against West Nile virus by promoting T cell cytotoxicity (PubMed:27795421). May play a beneficial role in influenza A virus (H5N1) infection by enhancing B cell recruitment and immune response in the lung (PubMed:21946434). 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 (PubMed:26735852).

Cellular Location
Secreted.

Tissue Location
Expressed by Th17 cell lineage (at protein level). The expression pattern reflects the differentiation state, with IL17A- IL17F heterodimers produced at higher levels than IL17A-IL17A and IL17F-IL17F dimers in fully differentiated Th17 cells (PubMed:16990136, PubMed:18025225). Expressed in innate lymphoid cells (at protein level) (PubMed:23255360, PubMed:28709803). Expressed in gamma-delta T cell subsets (at protein level) (PubMed:17372004, PubMed:20364087,

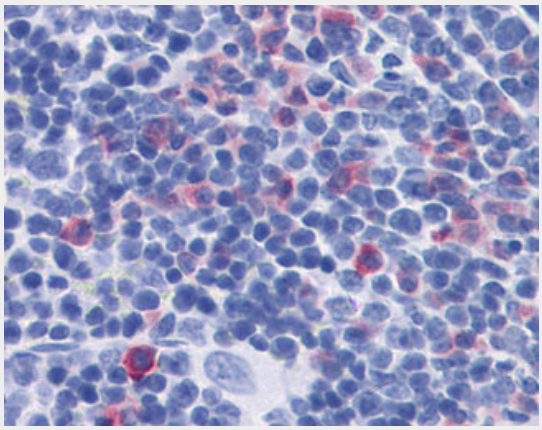
PubMed:26431948, PubMed:28709803). Expressed in iNKT cells (at protein level) (PubMed:17470641).

IL17 Antibody (clone TC11-18H10) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

IL17 Antibody (clone TC11-18H10) - Images



Anti-IL-17 antibody IHC of mouse spleen.

IL17 Antibody (clone TC11-18H10) - Citations

- Identification and analysis of key genes associated with ulcerative colitis based on DNA microarray data.