10320 Camino Santa Fe, Suite G
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# Anti-Rat IL-17A (RABBIT) Antibody Peroxidase Conjugated

**IL-17A Antibody Peroxidase Conjugated**
**Catalog # ASR5037**

## Specification

### Anti-Rat IL-17A (RABBIT) Antibody Peroxidase Conjugated - Product Information

| | |
|---|---|
| Host | **Rabbit** |
| Conjugate | **Peroxidase (Horseradish)** |
| Target Species | **Rat** |
| Reactivity | **Rat, Mouse** |
| Clonality | **Polyclonal** |
| Application | **WB, IHC, E, I, LCI** |
| Application Note | **This purified antibody has been tested for use in western blotting and suitable in ELISA. By western blot a band approximately 30.0 kDa in size corresponding to rat 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 rat 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) Gentamicin Sulfate. Do NOT add Sodium Azide!** |

### Anti-Rat IL-17A (RABBIT) Antibody Peroxidase Conjugated - Additional Information

**Other Names**
301289

**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 rat 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-Rat IL-17A (RABBIT) Antibody Peroxidase 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. 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. 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. In airway epithelium, mediates neutrophil chemotaxis via induction of CXCL1 and CXCL5 chemokines. 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. 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. Effector cytokine of innate immune cells including invariant natural killer cell (iNKT) and group 3 innate lymphoid cells that mediate initial neutrophilic inflammation. 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. 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. 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. Involved in antiviral host defense through various mechanisms.

**Cellular Location**
Secreted {ECO:0000250|UniProtKB:Q62386}.

## Anti-Rat IL-17A (RABBIT) Antibody Peroxidase 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 Cytomety
- Cell Culture

## Anti-Rat IL-17A (RABBIT) Antibody Peroxidase Conjugated - Images

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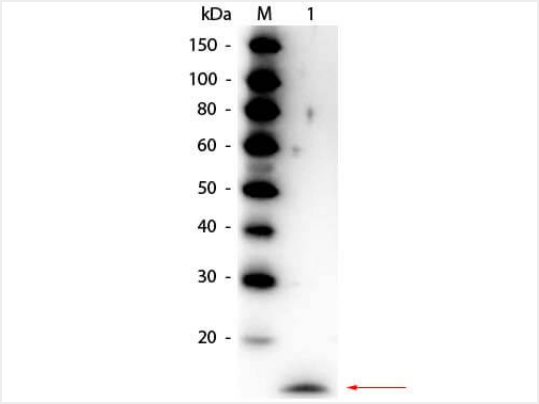


Western Blot of Rabbit anti-Rat IL-17A Antibody Peroxidase Conjugated. Lane 1: Recombinant Rat IL-17A. Load: 50 ng per lane. Primary antibody: Rabbit anti-Rat IL-17A Antibody Peroxidase Conjugated at 1:1,000 o/n at 4°C. Secondary antibody: none. Block: MB-070 for 30 minutes at RT. Predicted/Observed size: 17 kDa, 17 kDa for Rat IL-17A.

**Anti-Rat IL-17A (RABBIT) Antibody Peroxidase Conjugated - Background**

Rat IL17-A (also known as Interleukin-17, Cytotoxic T-lymphocyte-associated antigen 8 and CTLA-8) is a proinflammatory cytokine member of a six-species family of proteins (IL-17A-17F). Rat IL-17A protein is a homodimer consisting of two 134 amino acids peptides. IL-17A is secreted mainly by activated CD4+ and CD8+ T lymphocytes and acts through its receptor, IL-17R, to induce the expression of many mediators of inflammation, most strikingly, those that are involved in the proliferation, maturation and chemotaxis of neutrophils. Elevated levels of IL-17A have been associated with several conditions, including rheumatoid arthritis, airway inflammation, allograft rejection, inflammatory bowel disease, psoriasis, cancer and multiple sclerosis. There is 58% identity between the amino acid sequence of human and rat IL-17A.