

IL-17RA Antibody

Catalog # ASC11676

Specification

IL-17RA Antibody - Product Information

Application
Primary Accession
Other Accession
Reactivity

Host Clonality Isotype

Calculated MW

Application Notes

WB, IHC, IF

Q96F46

NP_055154, 23238208 Human, Mouse, Rat

Rabbit Polyclonal

IqG

Predicted: 95 kDa

Observed: 135 kDa KDa

IL-17RA antibody can be used for detection of IL-17RA by Western blot at 1 - 2 μ g/mL.

IL-17RA Antibody - Additional Information

Gene ID 23765

Target/Specificity

IL17RA; IL-17RA antibody is human, mouse and rat reactive. Multiple isoforms of IL-17RA are known to exist. This antibody is predicted to not cross-react with other IL-17 receptor subunits.

Reconstitution & Storage

IL-17RA antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

Precautions

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

IL-17RA Antibody - Protein Information

Name IL17RA (HGNC:5985)

Synonyms IL17R

Function

Receptor for IL17A and IL17F, major effector cytokines of innate and adaptive immune system involved in antimicrobial host defense and maintenance of tissue integrity. Receptor for IL17A (PubMed:17911633, PubMed:9367539). Receptor for IL17F (PubMed:19838198, PubMed:17911633, Binds to IL17A with higher affinity than to IL17F (PubMed:17911633). Binds IL17A and IL17F homodimers as part of a heterodimeric complex with IL17RC (PubMed:16785495). Also binds



heterodimers formed by IL17A and IL17F as part of a heterodimeric complex with IL17RC (PubMed: 18684971). Cytokine binding triggers homotypic interaction of IL17RA and IL17RC chains with TRAF3IP2 adapter, leading to 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:16785495, PubMed:24120361, PubMed:17911633, PubMed:17311033, PubMed:18684971, PubMed:21350122). Involved in antimicrobial host defense primarily promoting neutrophil activation and recruitment at infection sites to destroy extracellular bacteria and fungi (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). Plays a role in the maintenance of the integrity of epithelial barriers during homeostasis and pathogen infection. Stimulates 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. Enhances immunity against West Nile virus by promoting T cell cytotoxicity. Contributes to Influenza virus 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). Receptor for IL17C as part of a heterodimeric complex with IL17RE (PubMed: 21993848).

Cellular Location

[Isoform 1]: Cell membrane; Single-pass type I membrane protein

Tissue Location

Widely expressed..

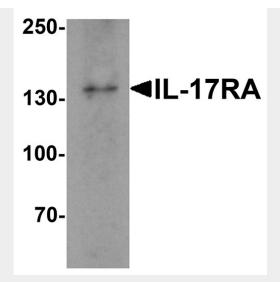
IL-17RA Antibody - Protocols

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

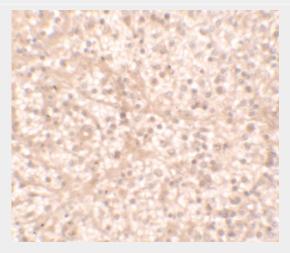
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

IL-17RA Antibody - Images

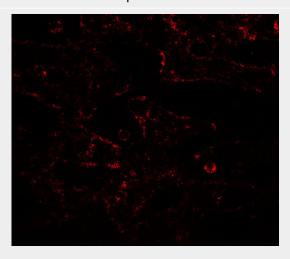




Western blot analysis of IL17RA in A20 cell lysate with IL17RA antibody at 1 $\mu g/mL$.



Immunohistochemistry of IL-17RA in human spleen tissue with IL-17RA antibody at 2.5 μg/ml.



Immunofluorescence of IL-17RA in human spleen tissue with IL-17RA antibody at 20 $\mu g/ml$.

IL-17RA Antibody - Background

IL-17RA Antibody: Interleukin 17A (IL-17A) is a proinflammatory cytokine secreted by activated T-lymphocytes (1). It is a potent inducer of the maturation of CD34-positive hematopoietic







precursors into neutrophils. IL-17RA is a ubiquitous type I membrane glycoprotein that binds with low affinity to IL-17A and IL-17F (1,2). IL-17A and its receptor play a pathogenic role in many inflammatory and autoimmune diseases such as rheumatoid arthritis (3,4). Defects in IL-17RA are the cause of familial candidiasis type 5 (CANDF5) which is a rare disorder with altered immune responses and impaired clearance of fungal infections (5).

IL-17RA Antibody - References

Yao Z, Painter SL, Fanslow WC, et al. Human IL-17: a novel cytokine derived from T cells. J. Immunol. 1995; 155: 5483-6.

Yao Z, Fanslow WC, Seldin MF, et al. Herpesvirus saimiri encodes a new cytokine, IL-17, which binds to a novel cytokine receptor. Immunity 1995; 3:811-21.

Rickel EA, Siegel LA, Yoon BR, et al. Identification of functional roles for both IL-17RB and IL-17RA in mediating IL-25-induced activities. J. Immunol. 2008;181:4299-310.

Wang M, Wang L, Ren T, et al. IL-17A/IL-17RA interaction promoted metastasis of osteosarcoma cells. Cancer Biol. Ther. 2012;14(2).