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IL-17RA Antibody

Catalog # ASC11676

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q96F46
Other Accession	NP_055154, 23238208
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	96122
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	IL-17RA antibody can be used for detection of IL-17RA by Western blot at 1 - 2 □g/mL.

Additional Information

Gene ID	23765
Other Names	Interleukin-17 receptor A, IL-17 receptor A, IL-17RA, CDw217, CD217, IL17RA, IL17R
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℃ for three months and -20℃, stable for up to one year.
Precautions	IL-17RA Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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:17911633, PubMed:19838198). 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:17911633, PubMed:18684971, PubMed:21350122, PubMed:24120361). 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..

Background

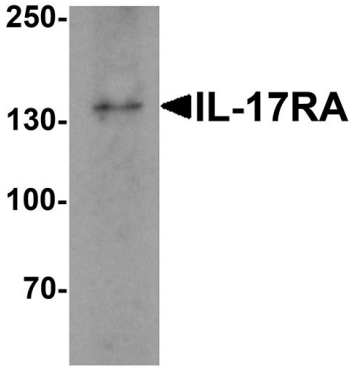
IL-17RA Antibody: Interleukin 17A (IL-17A) is a proinflammatory cytokine secreted by activated T-lymphocytes (1). It is a potent inducer of the maturation of CD34-positive hematopoietic precursors into neutrophils. IL-17RA is a ubiquitous type I membrane glycoprotein that binds with low affinity to IL-17A 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).

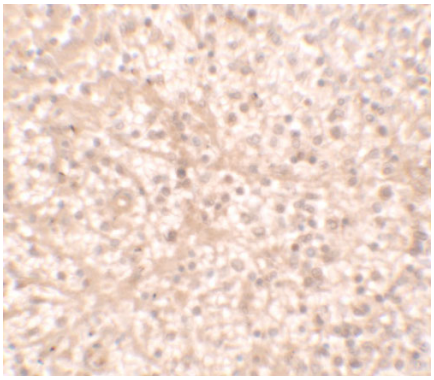
References

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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).

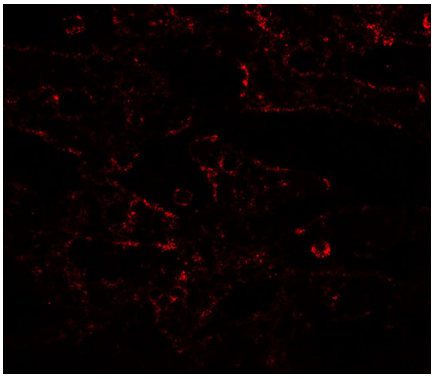
Images

Western blot analysis of IL17RA in A20 cell lysate with IL17RA antibody at 1 µg/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 µg/ml.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.