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#5503

IL-17RA Antibody

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W	Reactivity: H	Sensitivity: Endogenous	MW (kDa): 120-170	Source/Isotype: Rabbit	UniProt ID: #Q96F46	Entrez-Gene Id: 23765
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Product Usage Information

Application

Western Blotting

Dilution

1:1000

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

IL-17RA Antibody recognizes endogenous levels of total IL-17RA protein.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Val790 of human IL-17RA protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background

The IL-17 family of cytokines consists of IL-17A-F, and their receptors include IL-17RA-RE (1). IL-17 cytokines are produced by a variety of cell types including the Th17 subset of CD4+ T cells, as well as subsets of γδ T cells, NK cells, and NKT cells (2). IL-17A and IL-17F, the most well-studied of the IL-17 cytokines, contribute to fungal and bacterial immunity by inducing expression of proinflammatory cytokines, chemokines, and antimicrobial peptides (2). In addition, IL-17A contributes to the pathogenesis of several autoimmune diseases (3). IL-17E promotes Th2 cell responses (4). The roles of IL-17B, IL-17C, and IL-17D are less clear, however these family members also appear to have the capacity to induce proinflammatory cytokines (1,5,6). IL-17 receptors have an extracellular domain, a transmembrane domain, and a SEFIR domain. They are believed to signal as homodimers, heterodimers, or multimers through their SEFIR domain by recruiting the SEFIR domain-containing adaptor Act1 (7). Unlike most cytokines that signal through Jak/STAT pathways, IL-17 signaling results in NF-κB activation (8).

IL-17RA associates with IL-17RC to mediate signaling by homodimers and heterodimers of IL-17A and IL-17F (9,10). IL-17RA is broadly expressed, with highest expression in hematopoietic cells (11).

Background References

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- Yamaguchi, Y. et al. (2007) *J Immunol* 179, 7128-36.
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- Chang, S.H. et al. (2006) *J Biol Chem* 281, 35603-7.
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- Toy, D. et al. (2006) *J Immunol* 177, 36-9.
- Wright, J.F. et al. (2008) *J Immunol* 181, 2799-805.
- Yao, Z. et al. (1995) *Immunity* 3, 811-21.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween@ 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting

Cross-Reactivity Key

H: Human

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