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## **IL-17RA Antibody**



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

Applications:Reactivity:Sensitivity:MW (kDa):Source:UniProt ID:Entrez-Gene Id:WBHEndogenous120-170Rabbit#Q96F4623765

Product Usage<br/>InformationApplicationDilutionWestern Blotting1:1000

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.

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**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  $\gamma\delta$  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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- 4. Fort, M.M. et al. (2001) Immunity 15, 985-95.
- 5. Yamaguchi, Y. et al. (2007) J Immunol 179, 7128-36.
- 6. Li, H. et al. (2000) Proc Natl Acad Sci U S A 97, 773-8.
- 7. Chang, S.H. et al. (2006) *J Biol Chem* 281, 35603-7.
- 8. Shalom-Barak, T. et al. (1998) J Biol Chem 273, 27467-73.
- 9. Toy, D. et al. (2006) J Immunol 177, 36-9.
- 10. Wright, J.F. et al. (2008) *J Immunol* 181, 2799-805.
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**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 WB: Western Blotting

Cross-Reactivity Key H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus Mi: mink C: chicken Dm: D. melanogaster

X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Sc: S. cerevisiae Ce: C. elegans Hr: horse

GP: Guinea Pig Rab: rabbit All: all species expected

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**Limited Uses** 

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