

# IL-17R (F-12): sc-376600

## BACKGROUND

Cytokines are small, soluble proteins with pleiotropic effects on a variety of cell types. Cytokines have a regulatory function over the immune system and mediate aspects of inflammatory response. They exert their biological effects through the binding of membrane-bound receptors which, in turn, initiate signal transduction cascades and elicit physiological changes in their target cell. Interleukin-17 (IL-17) and its cognate receptor, IL-17R, are an example of such a cytokine receptor pair. Originally identified as a rodent cDNA termed CTLA8, IL-17 is capable of inducing the secretion of IL-6 and IL-8 and augmenting the expression of ICAM-1 in human fibroblast cultures. The IL-17 protein exhibits a striking degree of homology with the HSV13 protein which mimics its function. The IL-17 receptor is a type I transmembrane protein 864 amino acids in length, that is highly expressed in spleen and kidney.

## REFERENCES

1. Rouvier, E., et al. 1993. CTLA-8, cloned from an activated T cell, bearing AU-rich messenger RNA instability sequences, and homologous to a herpesvirus saimiri gene. *J. Immunol.* 150: 5445-5456.
2. Arend, W.P., et al. 1994. Binding of IL-1  $\alpha$ , IL-1  $\beta$ , and IL-1 receptor antagonist by soluble IL-1 receptors and levels of soluble IL-1 receptors in synovial fluids. *J. Immunol.* 153: 4766-4774.
3. Yao, Z., et al. 1995. Herpesvirus saimiri encodes a new cytokine, IL-17, which binds to a novel cytokine receptor. *Immunity* 3: 811-821.
4. Okamura, H., et al. 1995. Cloning of a new cytokine that induces IFN- $\gamma$  production by T cells. *Nature* 378: 88-91.
5. Yao, Z., et al. 1995. Human IL-17: a novel cytokine derived from T cells. *J. Immunol.* 155: 5483-5486.
6. Ihle, J.N. 1996. Janus kinases in cytokine signalling. *Philos. Trans. R. Soc. Lond., B, Biol. Sci.* 351: 159-166.
7. Yao, Z., et al. 1996. Complete nucleotide sequence of the mouse CTLA8 gene. *Gene* 168: 223-225.

## CHROMOSOMAL LOCATION

Genetic locus: IL17RA (human) mapping to 22q11.1; Il17ra (mouse) mapping to 6 F1.

## SOURCE

IL-17R (F-12) is a mouse monoclonal antibody raised against amino acids 33-200 mapping within an N-terminal extracellular domain of IL-17R of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

IL-17R (F-12) is recommended for detection of IL-17R of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for IL-17R siRNA (h): sc-40037, IL-17R siRNA (m): sc-40038, IL-17R shRNA Plasmid (h): sc-40037-SH, IL-17R shRNA Plasmid (m): sc-40038-SH, IL-17R shRNA (h) Lentiviral Particles: sc-40037-V and IL-17R shRNA (m) Lentiviral Particles: sc-40038-V.

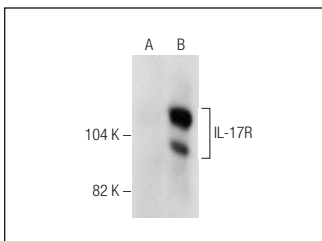
Molecular Weight of IL-17R: 120 kDa.

Positive Controls: Raji whole cell lysate: sc-364236, IL-17R (m2): 293T Lysate: sc-178795 or MOLT-4 cell lysate: sc-2233.

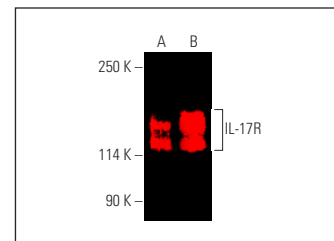
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



IL-17R (F-12): sc-376600. Western blot analysis of IL-17R expression in non-transfected: sc-117752 (A) and mouse IL-17R transfected: sc-178795 (B) 293T whole cell lysates.



IL-17R (F-12): sc-376600. Near-Infrared western blot analysis of IL-17R expression in Raji (A) and MOLT-4 (B) whole cell lysates. Blocked with UltraCruz® Blocking Reagent: sc-516214. Detection reagent used: m-IgG<sub>1</sub> BP-CFL 790: sc-533666.

## SELECT PRODUCT CITATIONS

1. Ma, C., et al. 2017. NDR1 protein kinase promotes IL-17- and TNF- $\alpha$ -mediated inflammation by competitively binding TRAF3. *EMBO Rep.* 18: 586-602.
2. Lin, W., et al. 2018. RKIP mediates autoimmune inflammation by positively regulating IL-17R signaling. *EMBO Rep.* 19: e44951.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.