

## IL-17R (N-16): sc-23122

### 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. CTLA8, 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. Okamura, H., et al. 1995. Cloning of a new cytokine that induces IFN- $\gamma$  production by T cells. *Nature* 378: 88-91.
4. Yao, Z., et al. 1995. Human IL-17: a novel cytokine derived from T cells. *J. Immunol.* 155: 5483-5486.
5. Yao, Z., et al. 1995. *Herpesvirus saimiri* encodes a new cytokine, IL-17, which binds to a novel cytokine receptor. *Immunity* 3: 811-821.
6. Ihle, J.N. 1996. Janus kinases in cytokine signalling. *Phil. Trans. Royal Soc. London* 351: 159-166.
7. Cohen, M.C., et al. 1996. Cytokine function: a study in biologic diversity. *Amer. J. Clin. Pathol.* 105: 589-598.
8. 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.

### SOURCE

IL-17R (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of IL-17R of human origin.

### PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-23122 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

IL-17R (N-16) is recommended for detection of IL-17R of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 shRNA Plasmid (h): sc-40037-SH and IL-17R shRNA (h) Lentiviral Particles: sc-40037-V.

Molecular Weight of IL-17R: 120 kDa.

### RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

### SELECT PRODUCT CITATIONS

1. Pongcharoen, S., et al. 2006. The effect of interleukin-17 on the proliferation and invasion of JEG-3 human choriocarcinoma cells. *Am. J. Reprod. Immunol.* 55: 291-300.

### STORAGE

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

### RESEARCH USE

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

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **IL-17R (G-9): sc-376374** or **IL-17R (F-12): sc-376600**, our highly recommended monoclonal alternatives to IL-17R (N-16).