

## IL-17B (H-16): sc-11139

### BACKGROUND

Cytokines are small, soluble proteins with pleiotropic effects on a variety of cell types, have a regulatory function over the immune system and mediate aspects of inflammatory response. Cytokines 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. IL-17B and IL-17C are two related family members that bind and activate different cell surface receptors, other than the IL-17 receptor. IL-17B and IL-17C also differ from IL-17 in their patterns of expression and biological activities. IL-17B is expressed in normal human adult pancreas, small intestine and stomach, whereas IL-17C is only expressed in adult prostate and fetal kidney.

### REFERENCES

1. 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.
2. Okamura, H., et al. 1995. Cloning of a new cytokine that induces IFN production by T cells. *Nature* 378: 88-91.
3. Cohen, M.C., et al. 1996. Cytokine function: a study in biologic diversity. *Am. J. Clin. Pathol.* 105: 589-598.
4. Ihle, J.N. 1996. Janus kinases in cytokine signalling. *Philos. Trans. R. Soc. Lond. B Biol. Sci.* 351: 159-166.
5. Li, H., et al. 2000. Cloning and characterization of IL-17B and IL-17C, two new members of the IL-17 cytokine family. *Prod. Natl. Acad. Sci. USA* 97: 773-778.

### CHROMOSOMAL LOCATION

Genetic locus: IL17B (human) mapping to 5q32; Il17b (mouse) mapping to 18 E1.

### SOURCE

IL-17B (H-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of IL-17B 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-11139 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### STORAGE

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

### PROTOCOLS

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

### APPLICATIONS

IL-17B (H-16) is recommended for detection of IL-17B of mouse, rat and 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).

IL-17B (H-16) is also recommended for detection of IL-17B in additional species, including equine, canine and bovine.

Suitable for use as control antibody for IL-17B siRNA (h): sc-39651, IL-17B siRNA (m): sc-39652, IL-17B shRNA Plasmid (h): sc-39651-SH, IL-17B shRNA Plasmid (m): sc-39652-SH, IL-17B shRNA (h) Lentiviral Particles: sc-39651-V and IL-17B shRNA (m) Lentiviral Particles: sc-39652-V.

### 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> Mounting Medium: sc-24941.

### PROTOCOLS

1. You, Z., et al. 2005. Expression of interleukin-17B in mouse embryonic limb buds and regulation by BMP-7 and  $\beta$ FGF. *Biochem. Biophys. Res. Commun.* 326: 624-631.

### RESEARCH USE

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