SANTA CRUZ BIOTECHNOLOGY, INC.

IL-17B (E-17): sc-11140



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. 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-17 C is only expressed in adult prostate and fetal kidney.

REFERENCES

- 1. Arend, W.P., et al. 1994. Binding of IL-1 α , IL-1 β , 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. Amer. 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 LOCATIONS

Genetic locus: IL17B (human) mapping to 5q32; II17b (mouse) mapping to 18 E1.

SOURCE

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

PRODUCT

Each vial contains 200 µg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-11140 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

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

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[™] 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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.