

IL-17 (E-19): sc-6077

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.

CHROMOSOMAL LOCATION

Genetic locus: IL17A (human) mapping to 6p12.2; Il17a (mouse) mapping to 1 A4.

SOURCE

IL-17 (E-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of IL-17 of mouse origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-6077 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.

PROTOCOLS

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

APPLICATIONS

IL-17 (E-19) is recommended for detection of IL-17 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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-17 siRNA (h): sc-39649, IL-17 siRNA (m): sc-39650, IL-17 shRNA Plasmid (h): sc-39649-SH, IL-17 shRNA Plasmid (m): sc-39650-SH, IL-17 shRNA (h) Lentiviral Particles: sc-39649-V and IL-17 shRNA (m) Lentiviral Particles: sc-39650-V.

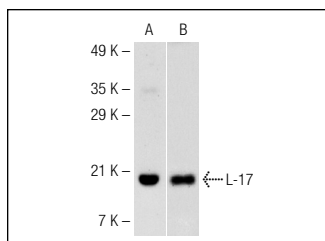
Molecular Weight of nonglycosylated IL-17: 15 kDa.

Positive Controls: IMR-32 cell lysate: sc-2409 or LNCaP cell lysate: sc-2231.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



IL-17 (E-19): sc-6077. Western blot analysis of mouse (A) and human (B) recombinant IL-17.

SELECT PRODUCT CITATIONS

1. Takahashi, N., et al. 2008. IL-17 produced by Paneth cells drives TNF-induced shock. *J. Exp. Med.* 205: 1755-1761.
2. Haasken, S., et al. 2011. Absence of β2 integrins impairs regulatory T cells and exacerbates CD4⁺ T cell-dependent autoimmune carditis. *J. Immunol.* 187: 2702-2710.
3. Lee, H.T., et al. 2013. Critical role of interleukin-17A in murine intestinal ischemia-reperfusion injury. *Am. J. Physiol. Gastrointest. Liver Physiol.* 304: G12-G25.
4. Liu, C., et al. 2013. Assessment of sperm antigen specific T regulatory cells in women with recurrent miscarriage. *Early Hum. Dev.* 89: 95-100.
5. Zhang, J., et al. 2014. Sublytic C5b-9 induces IL-6 and TGF-β1 production by glomerular mesangial cells in rat Thy-1 nephritis through p300-mediated C/EBPβ acetylation. *FASEB J.* 28: 1511-1525.

RESEARCH USE

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