

IL-17 (H-132): sc-7927

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. Yao, Z., et al. 1995. Human IL-17: a novel cytokine derived from T cells. *J. Immunol.* 155: 5483-5486.

CHROMOSOMAL LOCATION

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

SOURCE

IL-17 (H-132) is a rabbit polyclonal antibody raised against amino acids 24-155 of IL-17 of human origin.

PRODUCT

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

APPLICATIONS

IL-17 (H-132) is recommended for detection of IL-17 of human and, to a lesser extent, mouse and rat 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), immunohistochemistry (including paraffin-embedded sections) (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 IL-17: 15 kDa.

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

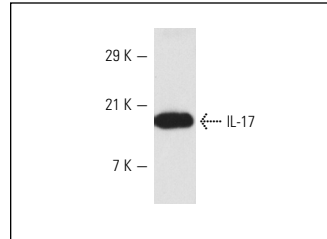
RESEARCH USE

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

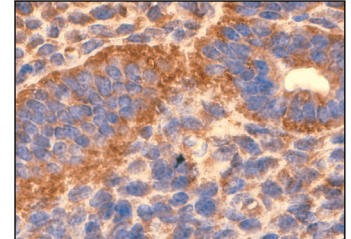
STORAGE

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

DATA



IL-17 (H-132): sc-7927. Western blot analysis of human recombinant IL-17.



IL-17 (H-132): sc-7927. Immunoperoxidase staining of formalin fixed, paraffin-embedded mouse uterus showing cytoplasmic and extracellular localization.

SELECT PRODUCT CITATIONS

1. Chung, D.R., et al. 2003. CD4+ T cells mediate abscess formation in intra-abdominal sepsis by an IL-17-dependent mechanism. *J. Immunol.* 170: 1958-1963.
2. Chu, S., et al. 2011. The expression of Foxp3 and ROR γ τ in lung tissues from normal smokers and chronic obstructive pulmonary disease patients. *Int. Immunopharmacol.* 11: 1780-1788.
3. Duan, Y.G., et al. 2011. Immunodeviation towards a Th17 immune response associated with testicular damage in azoospermic men. *Int. J. Androl.* 34: e536-e545.
4. Loverre, A., et al. 2011. IL-17 expression by tubular epithelial cells in renal transplant recipients with acute antibody-mediated rejection. *Am. J. Transplant.* 11: 1248-1259.
5. Takenaka, N., et al. 2011. Overexpression of phospholipase Cε in keratinocytes upregulates cytokine expression and causes dermatitis with acanthosis and T-cell infiltration. *Eur. J. Immunol.* 41: 202-213.
6. Tosolini, M., et al. 2011. Clinical impact of different classes of infiltrating T cytotoxic and helper cells (Th1, th2, treg, th17) in patients with colorectal cancer. *Cancer Res.* 71: 1263-1271.
7. Nakajima, K., et al. 2011. Distinct roles of IL-23 and IL-17 in the development of psoriasis-like lesions in a mouse model. *J. Immunol.* 186: 4481-4489.
8. Ma, C., et al. 2011. Colorectal cancer-derived Foxp3+ IL-17+ T cells suppress tumour-specific CD8+ T cells. *Scand. J. Immunol.* 74: 47-51.


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Try **IL-17 (G-4): sc-374218** or **IL-17 (1): sc-53937**, our highly recommended monoclonal alternatives to IL-17 (H-132). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **IL-17 (G-4): sc-374218**.