

IL-17F (G-6): sc-515029

BACKGROUND

The proinflammatory cytokine Interleukin 17 (IL-17) is produced by activated T cells to elicit potent cellular responses. IL-17 is secreted as a disulfide-linked homodimeric glycoprotein. A human IL-17 homolog IL-17E is a ligand for EV127/IL-17BR, which is also known as IL-17 receptor homolog 1. IL-17E mRNA is detected at very low levels in several peripheral tissues. IL-17E induces the activation of NF- κ B and stimulates the production of the proinflammatory chemokine IL-8. In addition, IL-17E has catabolic activity on human articular cartilage. IL-17E is a unique pleiotropic cytokine that may be an important mediator of inflammatory and immune responses. Another homolog of IL-17, IL-17F, is a secreted cytokine expressed only in activated CD4⁺ T cells and activated monocytes. IL-17F stimulates the production of other cytokines such as IL-6, IL-8 and granulocyte colony-stimulating factor, and regulates cartilage matrix turnover.

REFERENCES

1. Fossiez, F., et al. 1996. T cell interleukin-17 induces stromal cells to produce proinflammatory and hematopoietic cytokines. *J. Exp. Med.* 183: 2593-2603.
2. Hymowitz, S.G., et al. 2001. IL-17s adopt a cystine knot fold: structure and activity of a novel cytokine, IL-17F, and implications for receptor binding. *EMBO J.* 20: 5332-5341.
3. Lee, J., et al. 2001. IL-17E, a novel proinflammatory ligand for the IL-17 receptor homolog IL-17RH1. *J. Biol. Chem.* 276: 1660-1664.
4. Pan, G., et al. 2001. Forced expression of murine IL-17E induces growth retardation, jaundice, a Th2-biased response, and multiorgan inflammation in mice. *J. Immunol.* 167: 6559-6567.
5. Starnes, T., et al. 2001. Cutting edge: IL-17F, a novel cytokine selectively expressed in activated T cells and monocytes, regulates angiogenesis and endothelial cell cytokine production. *J. Immunol.* 167: 4137-4140.

CHROMOSOMAL LOCATION

Genetic locus: IL17F (human) mapping to 6p12.2.

SOURCE

IL-17F (G-6) is a mouse monoclonal antibody raised against amino acids 29-80 mapping near the N-terminus of IL-17F of human origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

IL-17F (G-6) is available conjugated to agarose (sc-515029 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515029 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515029 PE), fluorescein (sc-515029 FITC), Alexa Fluor[®] 488 (sc-515029 AF488), Alexa Fluor[®] 546 (sc-515029 AF546), Alexa Fluor[®] 594 (sc-515029 AF594) or Alexa Fluor[®] 647 (sc-515029 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-515029 AF680) or Alexa Fluor[®] 790 (sc-515029 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

IL-17F (G-6) is recommended for detection of IL-17F of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

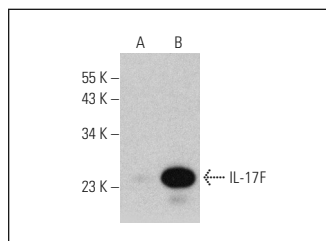
Suitable for use as control antibody for IL-17F siRNA (h): sc-39656, IL-17F shRNA Plasmid (h): sc-39656-SH and IL-17F shRNA (h) Lentiviral Particles: sc-39656-V.

Positive Controls: human IL-17F transfected HEK293T whole cell lysate.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 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 m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



IL-17F (G-6): sc-515029. Western blot analysis of IL-17F expression in non-transfected (A) and human IL-17F transfected (B) HEK293T whole cell lysates.

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 for detailed protocols and support products.

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