

IL-27 (C-14): sc-27489

BACKGROUND

IL-27 triggers expansion of antigen-specific naive CD4⁺ T cells and promotes polarization towards a Th1 phenotype with expression of γ -interferon. IL-27 contributes to the development of an adaptive immune response through its action on CD4⁺ T cells and also directly acts on cells of the innate immune system. IL-27 protein levels increase upon activation of antigen-presenting cells. IL-27 protein induces orphan cytokine receptor WSX-1/TCCR-dependent clonal expansion of naive but not memory CD4⁺ T cells. IL-27 signaling through TCCR/WSX-1 induces phosphorylation of Stat1-5. The predicted 243 amino acid human IL-27 protein, which is 73% identical to the mouse protein, contains an N-terminal signal peptide, several O-glycosylation sites and a stretch of 13 glutamate residues between helices C and D.

REFERENCES

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- Lucas, S., et al. 2003. IL-27 regulates IL-12 responsiveness of naive CD4⁺ T cells through Stat1-dependent and -independent mechanisms. *Proc. Natl. Acad. Sci. USA* 100: 15047-15052.
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- Artis, D., et al. 2004. The IL-27 receptor (WSX-1) is an inhibitor of innate and adaptive elements of type 2 immunity. *J. Immunol.* 173: 5626-5634.

CHROMOSOMAL LOCATION

Genetic locus: IL27 (human) mapping to 16; IL27 (mouse) mapping to 7 F3.

SOURCE

IL-27 (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of IL-27 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-27490 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

IL-27 (C-14) is recommended for detection of IL-27 of 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).

Suitable for use as control antibody for IL-27 siRNA (h): sc-72184, IL-27 shRNA Plasmid (h): sc-72184-SH and IL-27 shRNA (h) Lentiviral Particles: sc-72184-V.

Molecular Weight of IL-27: 69 kDa.

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.

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.


 MONOS
Satisfaction
Guaranteed

Try **IL-27 (LB-L22): sc-134367**, our highly recommended monoclonal alternative to IL-27 (C-14).