

IL-28R (L-17): sc-66537

BACKGROUND

IL-28R (interleukin-28 receptor α chain, cytokine receptor family 2 member 12, IFN- λ R1) is a 535 amino acid protein encoded by the human gene IL28RA. IL-28R belongs to the type II cytokine receptor family and contains one Fibronectin type III domain. It is a single-pass type I membrane protein found as a heterodimer with IL-10RB. This is a receptor for a small family of structurally-related cytokines that, like IFNs, are known to induce antiviral activity. The expression of IFN- λ (IL-28) mRNA is inducible by viral infection in several cell lines. The receptor complex (IL-28R) that is utilized by all three IFN- λ proteins for signaling is composed of two subunits, a receptor designated IL-28R and IL-10R2. Both receptor chains are constitutively expressed on a wide variety of human cell lines and tissues and signal through the JAK-Stat (Janus kinases-signal transducers and activators of transcription) pathway.

REFERENCES

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3. Dumoutier, L., et al. 2004. Role of the interleukin (IL)-28 receptor tyrosine residues for antiviral and antiproliferative activity of IL-29/interferon- λ 1: similarities with type I interferon signaling. *J. Biol. Chem.* 279: 32269-32274.
4. Meager, A., et al. 2005. Biological activity of interleukins-28 and -29: comparison with type I interferons. *Cytokine* 31: 109-118.
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CHROMOSOMAL LOCATION

Genetic locus: Ifnlr1 (mouse) mapping to 4 D3.

SOURCE

IL-28R (L-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of IL-28R of mouse 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-66537 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

IL-28R (L-17) is recommended for detection of Interleukin-28 Receptor of mouse and rat origin by Western Blotting (starting dilution 1:200, 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-28R siRNA (m): sc-62498, IL-28R shRNA Plasmid (m): sc-62498-SH and IL-28R shRNA (m) Lentiviral Particles: sc-62498-V.

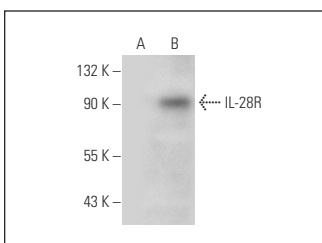
Molecular Weight of IL-28R: 60 kDa.

Positive Controls: IL-28R (m): 293T Lysate: sc-125493.

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-28R (L-17): sc-66537. Western blot analysis of IL-28R expression in non-transfected: sc-117752 (A) and mouse IL-28R transfected: sc-125493 (B) 293T 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 or our catalog for detailed protocols and support products.