

IL-28R (S-20): sc-66541

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 : 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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6. Chi, B., et al. 2006. α and λ interferon together mediate suppression of CD4 T cells induced by respiratory syncytial virus. *J. Virol.* 80: 5032-5040.
7. Osterlund, P.I., et al. 2007. IFN regulatory factor family members differentially regulate the expression of type III IFN (IFN- λ) genes. *J. Immunol.* 179: 3434-3442.

CHROMOSOMAL LOCATION

Genetic locus: IL28RA (human) mapping to 1p36.11.

SOURCE

IL-28R (S-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of IL-28R of human origin.

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.

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-66541 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

IL-28R (S-20) is recommended for detection of Interleukin-28 Receptor 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).

IL-28R (S-20) is also recommended for detection of Interleukin-28 Receptor in additional species, including canine and porcine.

Suitable for use as control antibody for IL-28R siRNA (h): sc-62497, IL-28R shRNA Plasmid (h): sc-62497-SH and IL-28R shRNA (h) Lentiviral Particles: sc-62497-V.

Molecular Weight of IL-28R: 60 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.

RESEARCH USE

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