SANTA CRUZ BIOTECHNOLOGY, INC.

IL-11Rα (H-300): sc-25476

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The pleiotropic cytokine, IL-11, has been shown to have proliferative and differentiation effects on lymphopoietic, myeloid and erythroid cells. IL-11 also has the inhibiting effect of repressing adipogenesis *in vitro*. The IL-11α receptor, IL-11Rα, is a member of the class 1 subgroup of the cytokine receptor family and exhibits structural similarity to the α subunits of the human ciliary neurotrophic factor (CNTF) and the mouse IL-6 receptor. It is speculated that the IL-11Rα regulates the proliferation and/or differentiation of skeletogenic progenitor and mesenchymal cells. Co-expression of gp130 and IL-11α is necessary for high-affinity binding of IL-11 to IL-11Rα. It has also been found that co-expression of IL-11Rα and gp130 is required for proper stimulation of Ba/F3 cells to differentiate into macrophage in response to IL-11.

REFERENCES

1. Quesniaux, V.G., et al. 1993. Review of a novel hematopoietic cytokine, interleukin-11. Intl. Rev. Exp. Pathol. 34A: 205-214.
2. Keith, J.C., et al. 1994. IL-11, a pleiotropic cytokine: exciting new effects of IL-11 on gastrointestinal mucosal biology. Stem Cells 12: 79-89.

CHROMOSOMAL LOCATION

Genetic locus: IL11RA (human) mapping to 9p13.3; Il11ra1 (mouse) mapping to 4 A5.

SOURCE

IL-11Rα (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 of IL-11Rα 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-11Rα (H-300) is recommended for detection of IL-11Rα of mouse, rat and human 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

IL-11Rα (H-300) is also recommended for detection of IL-11Rα in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for IL-11Rα siRNA (h): sc-35647, IL-11Rα siRNA (m): sc-35648, IL-11Rα shRNA Plasmid (h): sc-35647-SH, IL-11Rα shRNA Plasmid (m): sc-35648-SH, IL-11Rα shRNA (h) Lentiviral Particles: sc-35647-V and IL-11Rα shRNA (m) Lentiviral Particles: sc-35648-V.

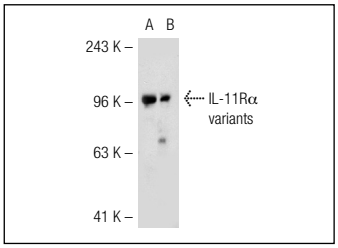
Molecular Weight of IL-11Rα: 51/151 kDa.

Positive Controls: 3T3-L1 cell lysate: sc-2243, IL-11Rα (m2): 293T Lysate: sc-125492 or K-562 whole cell lysate: sc-2203.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



IL-11Rα (H-300): sc-25476. Western blot analysis of IL-11Rα expression in non-transfected: sc-117752 (**A**) and mouse IL-11Rα transfected: sc-125492 (**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.