## SANTA CRUZ BIOTECHNOLOGY, INC.

# IL-9R (H-230): sc-50316



## BACKGROUND

Interleukin-9 (IL-9) functions to support the growth of helper T cells, megakaryoblastic leukemia cells, fetal thymocytes, erythroid and myeloid precursors and mast cells. The murine IL-9 receptor has been identified as a protein expressed on a T cell clone. Both the murine and human IL-9 receptor cDNAs have been isolated by expression cloning from the murine T cell clone TS1 and the human megakaryoblastic leukemia cell line MO7E, respectively. In addition, the cloning and analysis of the complete human IL-9 receptor genomic DNA has been reported. In this latter study, the IL-9R gene was shown to consist of 10 exons expressed over approximately 13.7 kb of DNA.

## REFERENCES

- 1. Uyttenhove, C., et al. 1988. Functional and structural characterization of P40, a mouse glycoprotein with T cell growth factor activity. Proc. Natl. Acad. Sci. USA 85: 6934-6938.
- 2. Yang, Y.C., et al. 1989. Expression cloning of a cDNA encoding a novel human hematopoietic growth factor: human homologue of murine T cell growth factor P40. Blood 74: 1880-1884.
- 3. Donahue, R.E., et al. 1990. Human P40 T cell growth factor (interleukin-9) supports erythroid colony formation. Blood 75: 2271-2275.
- 4. Druez, C., et al. 1990. Functional and biochemical characterization of mouse P40/IL-9 receptors. J. Immunol. 145: 2494-2499.
- 5. Renauld, J.C., et al. 1992. Expression cloning of the murine and human IL-9 receptor cDNAs. Proc. Natl. Acad. Sci. USA 89: 5690-5694.
- 6. Chang, M.S., et al. 1994. Isolation and characterization of the human IL-9 receptor gene. Blood 83: 3199-3205.

## CHROMOSOMAL LOCATION

Genetic locus: IL9R (human) mapping to Xq28

## SOURCE

IL-9R (H-230) is a rabbit polyclonal antibody raised against amino acids 41-270 mapping within an N-terminal extracellular domain of IL-9R of human origin.

## PRODUCT

Each vial contains 200 µg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## **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.

## **APPLICATIONS**

IL-9R (H-230) is recommended for detection of IL-9R of 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).

Suitable for use as control antibody for IL-9R siRNA (h): sc-40049, IL-9R shRNA Plasmid (h): sc-40049-SH and IL-9R shRNA (h) Lentiviral Particles: sc-40049-V.

Molecular Weight of human IL-9R: 57 kDa.

Molecular Weight of mouse IL-9R: 52 kDa.

Positive Controls: MOLT-4 cell lysate: sc-2233.

#### **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<sup>™</sup> compatible goat antirabbit 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<sup>™</sup> Mounting Medium: sc-24941.



Try IL-9R (F-3): sc-515622, our highly recommended monoclonal alternative to IL-9R (H-230).