

IL-9R (C-19): sc-698

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 M07E, 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. Druetz, 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 interleukin-9 receptor cDNAs. *Proc. Natl. Acad. Sci. USA* 89: 5690-5694.
6. Chang, M.S., et al. 1994. Isolation and characterization of the human interleukin-9 receptor gene. *Blood* 83: 3199-3205.

CHROMOSOMAL LOCATION

Genetic locus: IL9R (human) mapping to Xq28.

SOURCE

IL-9R (C-19) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of IL-9R 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.

Blocking peptide available for competition studies, sc-698 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

IL-9R (C-19) is recommended for detection of IL-9R 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-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™ 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) 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.

SELECT PRODUCT CITATIONS

1. Grasso, L., et al. 1998. Molecular analysis of human interleukin-9 receptor transcripts in peripheral blood mononuclear cells. *J. Biol. Chem.* 273: 24016-24024.
2. Demoulin, J.B., et al. 1999. Distinct roles for STAT1, STAT3, and STAT5 in differentiation gene induction and apoptosis inhibition by interleukin-9. *J. Biol. Chem.* 274: 25855-25861.
3. Louahed, J., et al. 2000. Interleukin-9 upregulates mucus expression in the airways. *Am. J. Respir. Cell Mol. Biol.* 22: 649-656.

RESEARCH USE

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



Try **IL-9R (F-3): sc-515622**, our highly recommended monoclonal alternative to IL-9R (C-19).