

IL-9R (17J-1): sc-80119

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. Uytendhoeve, 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 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 (mouse) mapping to 11 A4.

SOURCE

IL-9R (17J-1) is a rat monoclonal antibody raised against the extracellular domain of IL-9R of mouse origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} in 1.0 ml of PBS with < 0.1% sodium azide and protein stabilizer.

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 for detailed protocols and support products.

APPLICATIONS

IL-9R (17J-1) is recommended for detection of IL-9R of mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), flow cytometry (1 µg per 1 x 10⁶ cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for IL-9R siRNA (m): sc-40050, IL-9R shRNA Plasmid (m): sc-40050-SH and IL-9R shRNA (m) Lentiviral Particles: sc-40050-V.

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

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

Positive Controls: mouse embryo extract: sc-364239.

SELECT PRODUCT CITATIONS

1. Zhou, Y., et al. 2011. IL-9 promotes Th17 cell migration into the central nervous system via CC chemokine ligand-20 produced by astrocytes. *J. Immunol.* 186: 4415-4421.

RESEARCH USE

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