



IL-9 (hBA-127): sc-4602

BACKGROUND

Interleukin-9, or IL-9, is a TH2 cytokine that has been shown to promote the antigen-independent growth of some T helper clones. IL-9 is a pleiotropic cytokine with multiple functions on cells of lymphoid, myeloid and mast cell lineages. Both mouse and human cDNAs encode 144 amino acid precursors with 18 amino acid residue signal peptides that are cleaved to form the mature 14 kDa biologically active glycoprotein. Although IL-9 is constitutively expressed *in vitro* by several transformed T cell lines, IL-9 expression can be induced in human peripheral blood T lymphocytes by T cell activators such as phorbol esters (PHA) and anti-CD3 antibodies. IL-9 exerts its biological effects through the interleukin-9 receptor, IL-9R. IL-9R is composed of at least two subunits: the IL-2 receptor γ chain, which is common to the IL-2, IL-4, IL-7 and IL-15 receptors, and one specific to the IL-9 receptor.

REFERENCES

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4. Houssiau, F.A., Schandene, L., Stevens, M., Cambiaso, C., Goldman, M., van Snick, J., and Renauld, J.C. 1995. A cascade of cytokines is responsible for IL-9 expression in human T cells. Involvement of IL-2, IL-4, and IL-10. *J. Immunol.* 154: 2624-2630.
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SOURCE

IL-9 (hBA-127) is produced in *E. coli* as 40 kDa biologically active, GST-tagged fusion protein corresponding to 127 amino acids of IL-9 of human origin.

PRODUCT

IL-9 (hBA-127) is purified from bacterial lysates (>98%); supplied as 50 μ g purified protein.

BIOLOGICAL ACTIVITY

IL-9 (hBA-127) is biologically active as determined by the dose-dependent proliferation of human M-07E cells.

Expected ED₅₀: <0.2 ng/ml.

Specific Activity: Greater than 5 x 10⁶ units/mg.

STORAGE

Store at -20° C; stable for one year from the date of shipment.

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.