

IL-13 (JES10-2E10): sc-52564

BACKGROUND

Interleukin-13, or IL-13, is a pleiotropic cytokine that exhibits 30% sequence identity with IL-4 and shares many of the same biological activities. Like IL-4, IL-13 affects monocytes, macrophages and B cells by upregulating the expression of CD23 and MHC proteins, and downregulating the expression of CD14. Both IL-4 and IL-13 are secreted by activated T lymphocytes and are powerful regulators of inflammation. Both inhibit the secretion of proinflammatory cytokines and chemokines from activated monocytes and stimulate the expression of IgE on activated B cells. IL-13 contains five Cysteine residues and multiple N-linked glycosylation sites and has been reported to inhibit the production of IL-2 in natural killer cells. IL-13 cDNA encodes a 131 amino acid precursor with a 20 amino acid signal peptide which is cleaved to generate a mature protein.

REFERENCES

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3. Deleuran, B., et al. 1995. Interleukin-13 suppresses cytokine production and stimulates the production of 15-HETE in PBMC. A comparison between IL-4 and IL-13. *Cytokine* 7: 319-324.
4. Katz, Y., et al. 1995. IL-13 results in differential regulation of the complement proteins C3 and Factor B in tumour necrosis factor (TNF)-stimulated fibroblasts. *Clin. Exp. Immunol.* 101: 150-156.
5. Cosentino, G., et al. 1995. IL-13 down-regulates CD14 expression and TNF- α secretion in normal human monocytes. *J. Immunol.* 155: 3145-3151.
6. de Vries, J.E., et al. 1995. Immunoregulatory properties of IL-13: its potential role in atopic disease. *Int. Arch. Allergy Immunol.* 106: 175-179.
7. Marietta, E.V., et al. 1996. Modulation of expression of the anti-inflammatory cytokines Interleukin-13 and Interleukin-10 by Interleukin-3. *Eur. J. Immunol.* 26: 49-56.
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CHROMOSOMAL LOCATION

Genetic locus: IL13 (human) mapping to 5q31.1.

SOURCE

IL-13 (JES10-2E10) is a rat monoclonal antibody raised against full length IL-13 of human origin.

PRODUCT

Each vial contains 100 μ g IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

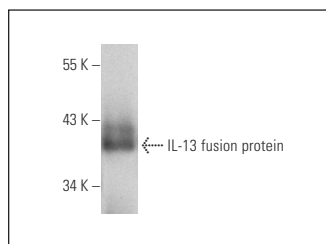
IL-13 (JES10-2E10) is recommended for detection of IL-13 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for IL-13 siRNA (h): sc-39642, IL-13 shRNA Plasmid (h): sc-39642-SH and IL-13 shRNA (h) Lentiviral Particles: sc-39642-V.

Molecular Weight of IL-13: 13 kDa.

Positive Controls: human heart extract: sc-363763.

DATA



IL-13 (JES10-2E10): sc-52564. Western blot analysis of human recombinant IL-13 fusion protein.

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 for detailed protocols and support products.