

IL-13 (38213.11): sc-57262

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

1. Minty, A., et al. 1993. Interleukin-13 is a new human lymphokine regulating inflammatory and immune responses. *Nature* 362: 248-250.
2. McKenzie, A., et al. 1994. Measurement of IL-13. In J. Coligamn, et al, eds., *Current Protocols in Immunology*. New York: John Wiley and Sons, Unit 6.18.
3. Zurawski, G., et al. 1994. Interleukin-13 elicits a subset of the activities of its close relative interleukin-4. *Stem Cells* 12: 169-174.
4. Abrams, J. 1995. Immunoenzymetric assay of mouse and human cytokines using NIP-labeled anti-cytokine antibodies. In J. Coligamn, et al, eds., *Current Protocols in Immunology*. New York: John Wiley and Sons, Unit 6.20.1.
5. 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.
6. Cosentino, G., et al. 1995. IL-13 downregulates CD14 expression and TNF α secretion in normal human monocytes. *J. Immunol.* 155: 3145-3151.
7. 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.
8. Deleuran, B., et al. 1996. 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.
9. Marietta, EV., 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.

CHROMOSOMAL LOCATION

Genetic locus: Il13 (mouse) mapping to 11 B1.3.

SOURCE

IL-13 (38213.11) is a rat monoclonal antibody raised against full length IL-13 of mouse origin.

PRODUCT

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

APPLICATIONS

IL-13 (38213.11) is recommended for detection of IL-13 of mouse origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for IL-13 siRNA (m): sc-39643, IL-13 shRNA Plasmid (m): sc-39643-SH and IL-13 shRNA (m) Lentiviral Particles: sc-39643-V.

Molecular Weight of IL-13: 13 kDa.

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.