

# IL-13 (A130D 12G5 1E4): sc-101407

## 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 pro-inflammatory 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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- Zurawski, G., et al. 1994. Interleukin-13 elicits a subset of the activities of its close relative interleukin-4. *Stem Cells* 12: 169-174.
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- Suresh, V., et al. 2007. Measurement of IL-13-induced iNOS-derived gas phase nitric oxide in human bronchial epithelial cells. *Am. J. Respir. Cell Mol. Biol.* 37: 97-104.
- Knackmuss, S., et al. 2007. Specific inhibition of interleukin-13 activity by a recombinant human single-chain immunoglobulin domain directed against the IL-13 receptor  $\alpha$ 1 chain. *Biol. Chem.* 388: 325-330.

## SOURCE

IL-13 (A130D 12G5 1E4) is a mouse monoclonal antibody raised against recombinant IL-13 of rat origin.

## PRODUCT

Each vial contains 100  $\mu$ g IgG<sub>1</sub> in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

IL-13 (A130D 12G5 1E4) is recommended for detection of recombinant and native IL-13 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), flow cytometry (1  $\mu$ g per 1  $\times$  10<sup>6</sup> cells) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of IL-13: 13 kDa.

## SELECT PRODUCT CITATIONS

- Fang, C., et al. 2015. Downregulation of SUMF2 gene in ovalbumin-induced rat model of allergic inflammation. *Int. J. Clin. Exp. Pathol.* 8: 12053-12063.

## 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](http://www.scbt.com) for detailed protocols and support products.