

TECHNICAL DATA SHEET

Recombinant Human IL-13

Catalog Number: 21-8139

RPx-Pro™ Recombinant Protein PRODUCT INFORMATION

CONTENTS

Recombinant Human IL-13

DESCRIPTION

IL-13, produced primarily by Th2 cells and to a lesser extent by mast and NK cells, is an immunoregulatory cytokine. Its various functions include induction of matrix metalloproteinases, enhancement of IgE secretion from activated B cells and B cell proliferation. Additionally, IL-13 plays a role in the inhibition of the expression of inflammatory cytokines including IL-1 β , TNF- α , IL-6 and IL-8.

MOLECULAR MASS

Recombinant Human IL-13 is a 12.6 kDa protein composed of 115 amino acid residues.

AMINO ACID SEQUENCE

MSPGPVPPST ALRELIEELV NITQNQKAPL CNGSMVWSIN LTAGMYCAAL ESLINVSGCS AIEKTQRMLS GFCPHKVSAG QFSSLHVRDT KIEVAQFVKD LLLHLKFLR EGRFN

SOURCE

E. Coli

PROTEIN CONTENT

Content Verified by UV Spectroscopy and/or SDS-PAGE gel.

PURITY

98 %

ENDOTOXIN LEVEL

Endotoxin level is <0.1 ng/ μ g of protein (<1EU/ μ g).

AUTHENTICITY

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

CROSS REACTIVITY

Mouse

BIOACTIVITY

The ED₅₀ as determined by the dose-dependent proliferation of TF-1 cells was \leq 1.0 ng/ml, corresponding to a specific activity of \geq 1 x 10⁶ units/mg.

APPLICATIONS

Bioassay

RESEARCH AREAS

AIDS/HIV; Cancer; Immune System; Inflammation ; Stem Cells & Differentiation; Allergy

STORAGE

-20°C

RECONSTITUTION

See Certificate of Analysis (COA) for lot specific reconstitution information

REFERENCES

Minty A, Chalon P, Derocq JM, Dumont X, Guillemot JC, Kaghad M, Labit C, Leplatois P, Liauzun P, Miloux B (March 1993). "Interleukin-13 is a new human lymphokine regulating inflammatory and immune responses". *Nature* 362 (6417): 248–50. McKenzie AN, Culpepper JA, de Waal Malefyt R, Brière F, Punnonen J, Aversa G, Sato A, Dang W, Cocks BG, Menon S (April 1993). "Interleukin 13, a T-cell-derived cytokine that regulates human monocyte and B-cell function". *Proc. Natl. Acad. Sci. U.S.A.* 90 (8): 3735–9. Wynn TA (2003). "IL-13 effector functions". *Annu. Rev. Immunol.* 21: 425–56.

NOTE: Please choose the appropriate format for each application. Citations are provided as a convenience to you; please consult Materials and Methods sections for additional details about the use of any product in these publications.

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