

TECHNICAL DATA SHEET

Recombinant Human IL-10 (Carrier-free)

Catalog Number: 21-8109

RPx-Pro™ Recombinant Protein
PRODUCT INFORMATION

CONTENTS

Recombinant Human IL-10 (Carrier-free)

DESCRIPTION

IL-10 is elaborated and secreted by macrophages, monocytes, T cells, B cells and keratinocytes and is well characterized as a potent immunosuppressive and anti-inflammatory cytokine. IL-10 has been shown to exert inhibitory effects on Th0, Th1 and Th2 subsets and monocytes. IL-10 has been shown also to inhibit expression of co-stimulatory molecules such as CD80 and CD86 on antigen presenting cells. IL-10 has also been shown to enhance B-cell and other responses in specific scenarios. Because of its pleiotropic role, IL-10 has been explored as a therapeutic agent in inflammatory diseases and cancer.

MOLECULAR MASS

This recombinant protein is 161 amino acid residues with a molecular weight of 18.6 kDa.

AMINO ACID SEQUENCE

MSPGQGTQSE NSCTHFPGNL PNMLRDLRDA FSRVKTFQFM KDQLDNLLK ESLLDFKGY LGCQALSEMI QFYLEEVMMPQ
AENQDPDIKA HVNSLGENLK TLRRLRRCH RFLPCENKSK AVEQVKNAFN KLQEKGIYKA MSEFDIFINY IEAYMTMKIR N

SOURCE

E. Coli

APPLICATIONS

Bioassay

PURITY

98 %

STORAGE

-20°C

PROTEIN CONTENT

Content Verified by UV Spectroscopy and/or SDS-PAGE

ENDOTOXIN LEVEL

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

AUTHENTICITY

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

CROSS REACTIVITY

Bacteria, Monkey, Mouse, Virus

BIOACTIVITY

The ED₅₀ was found to be 2.0 ng/ml, corresponding to a specific activity of 5 x 10⁵ units/mg determined by the dose-dependent co-stimulation (with human IL-4) of MC/9 cells.

RESEARCH AREAS

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

RECONSTITUTION

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

REFERENCES

Groux, H, M Bigler, JE DeVries and M-GRoncarolo 1998 J Immunol 160: 3188-3193
de Waal Malefyt R, J Abrams, B Bennett, CG Figdor and JE de Vries 1991 J Exp Med 174: 1209
Fiorentino DF, A Zlotnik, TR Mosmann, M Howard and A O'Garra 1991 J Immunol 147(11): 3815-3822
Ding L, PS Linsley, LY Huang, RN Germain and EM Shevach 1993 J Immunol 151(3): 1224-1234
O'Garra A, FJ Barrat, AG Castro, A Vicari and C Hawrylowicz 2008 Immunol Rev. 223: 114-131.

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