

TECHNICAL DATA SHEET

Recombinant Mouse IL-10 (Carrier-free)

Catalog Number: 21-8101

RPx-Pro™ Recombinant Protein
PRODUCT INFORMATION

CONTENTS

Recombinant Mouse IL-10 (Carrier-free)

DESCRIPTION

IL-10 is an immunosuppressive cytokine produced by a variety of mammalian cell types including macrophages, monocytes, T cells, B cells, mast cells in mice, and keratinocytes. IL-10 inhibits the expression of proinflammatory cytokines such as IL-1 and TNF-alpha. Similar to IL-4, IL-10 enhances humoral immune responses through Th2 cells and B cells. IL-10 attenuates cell-mediated immune reactions. IL-10 inhibits synthesis of pro-inflammatory cytokines from macrophages and Tregs and also suppresses the antigen-presentation capacity of antigen presenting cells. IL-10 is stimulatory for Th2 cells and enhances B cell maturation and antibody production.

MOLECULAR MASS

Recombinant Mouse IL-10 is an 18.7 kDa protein of 161 amino acid residues.

AMINO ACID SEQUENCE

MSRGQYSRED NNCTHFPVGQ SHMLLELRTA FSQVKTFQK KDQLDNILLT DSLMQDFKGY LGCQALSEMI QFYLVEVMPQ
AEKHGPEIKE HLNSLGQKLLK TLRMLRRCH RFLPCENKSK AVEQVKSDFN KLEDQGVYKA MNEFDIFINC IEAYMMIKMK S

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

Human

BIOACTIVITY

Measured by the dose-dependent co-stimulation (with IL-4) of mouse MC/9 cells proliferation. The ED₅₀ is calculated to be <2 ng/ml, corresponding to a specific activity of >5 x 10⁵ units/mg .

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

Eskdale J, D Kube , H Tesch and G Gallagher 1997 Immunogenetics 46 (2): 120–128.Said EA, L Trautmann, F Dupuy, Y Zhang, P Ancuta, M El-Fari, D Douek, E Haddad and RP Sekaly 2010 Nat Med 16(4): 452–459.Saraiva M and A O'Garra 2010 Nat Rev Immunol 10: 170–181.Sharma A, M Kumar, J Aich, M Hariharan, SK Brahmachari, A Agrawal and B Ghosh 2009 Proc Natl Acad Sci USA 106(14): 5761–5766.Braat H, P Rottiers, DW Hommes, N Huyghebaert, E Remaut, JP Remon, SJ van Deventer, S Neiryck, MP Peppelenbosch and L Steidler 2006 Clin Gastroenterol Hepatol 4(6): 754–759.

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