

TECHNICAL DATA SHEET

Recombinant Human IL-7 (E. coli Derived) (Carrier-free)

Catalog Number: 21-8079

RPx-Pro™ Recombinant Protein
PRODUCT INFORMATION

CONTENTS

Recombinant Human IL-7 (E. coli Derived) (Carrier-free)

DESCRIPTION

IL-7 is a hemopoietin family member that factor is produced by bone marrow, thymic stromal cells and spleen cells, among others. This cytokine is a growth factor for progenitor B cells and T cells that signals through the IL-7R, comprised of IL-7Ralpha (CD127) and the common gamma chain (CD132). IL-7 is required for optimal T cell-dendritic cell interaction and contributes to T-cell homeostasis.

MOLECULAR MASS

Recombinant human IL-7 is a 17.4 kDa protein containing 153 amino acid residues.

AMINO ACID SEQUENCE

MDCDIEGKDG KQYESVLMVS IDQLLDMSMKE IGSNCLNNEF NFFKRHCDA NKEGMFLFRA ARKLRQFLKM NSTGDFDLHL LKVSEGTTIL LNCTGQVKGR
 KPAALGEAQP TKSLEENKSL KEQKLNLDLC FLKRLLEQIK TCWNKILMGT KEH

SOURCE

E. coli

APPLICATIONS

Bioassay

PURITY

98 %

STORAGE

-20°C

PROTEIN CONTENT

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

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

Monkey, Mouse, Rat

BIOACTIVITY

The ED₅₀ was determined by the dose-dependent stimulation of the proliferation of murine 2E8 cells is ≤ 0.5 ng/ml, corresponding to a specific activity of ≥ 2 x 10⁶ units/mg.

RESEARCH AREAS

Cancer; Inflammation; Stem Cells & Differentiation

RECONSTITUTION

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

REFERENCES

Saini M, Pearson C and Seddon B. 2009. Blood. 113(23): 5793-5800. Sasson SC, Zaunders JJ and Kelleher AD. 2006. Curr Drug Targets. 7(12): 1571-1582. Schluns KS, Kieper WC, Jameson SC and Lefrancois L. 2000. Nat Immunol. 1(5): 426-432. Priely JA and LeBien TW. 1996. Proc Natl Acad Sci USA. 93(19): 10348-10353. Ye M and Graf T. 2007. Curr Opin Immunol. 19(2): 123-128.

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