

TECHNICAL DATA SHEET

Recombinant Mouse IL-7 (Carrier-free)

Catalog Number: 21-8071

RPx-Pro™ Recombinant Protein

PRODUCT INFORMATION

CONTENTS

Recombinant Mouse IL-7 (Carrier-free)

DESCRIPTION

IL-7 is a hematopoietic growth factor that is produced in and secreted by stromal cells in the bone marrow and thymus. It is also produced by keratinocytes, dendritic cells, and epithelial cells. IL-7 stimulates the differentiation of multipotent (pluripotent) hematopoietic stem cells into lymphoid progenitor cells. IL-7 plays a critical role in B cell maturation as well as the development, survival, and homeostasis of T and NK cells.

MOLECULAR MASS

Recombinant Mouse IL-7 is a 15.0 kDa protein composed of 130 amino acid residues.

AMINO ACID SEQUENCE

MECHIKDKEG KAYESVLMIS IDELDKMTGT DSNCPNNEPN FFRKHVCDT KEAAFLNRAA RKLKQFLKMN ISEEFNVHLL
TVSQGTQTLV NCTSKEEKNV KEQKNDACF LKRLLEIKT CWNKILKGS

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

N/A

BIOACTIVITY

The ED₅₀ as determined by the dose-dependent stimulation of the proliferation of mouse 2E8 cells is ≤0.2 ng/ml, corresponding to a specific activity of ≥5 x 10₆ units/mg.

RESEARCH AREAS

Cancer; Inflammation; Stem Cells & Differentiation

RECONSTITUTION

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

REFERENCES

Namen AE, S Lupton, K Hjerrild, J Wignall, DY Mochizuki, A Schmierer, B Mosley, CJ March, D Urdal and S Gillis 1988 Nature 333(6173): 571–573. Muegge K, MP Vila and SK Durum 1993 Science 261 (5117) :93–95.

Citations are provided as a resource for additional applications that have not been validated by Tonbo Biosciences. Please choose the appropriate format for each application and consult Materials and Methods sections for additional details about the use of any product in these publications.

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