

TECHNICAL DATA SHEET

Recombinant Human IL-7 (HEK293 Derived) (Carrier-Free)

Catalog Number: 21-9120

RPx-Pro™ Recombinant Protein
PRODUCT INFORMATION

CONTENTS

Recombinant Human IL-7 (HEK293 Derived) (Carrier-Free)

DESCRIPTION

IL-7 is a hematopoietic growth factor that primarily affects early B and T cells. Produced by thymic stromal cells, spleen cells and keratinocytes, IL-7 can also co-stimulate the proliferation of mature T cells in combination with other factors, such as ConA and IL-2. Human and Mouse IL-7 are cross-species reactive.

MOLECULAR MASS

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

AMINO ACID SEQUENCE

MDCDIEGKDG KQYESVLMVS IDQLLDSMKE IGSNCLNNEF NFFKRHCDA NKEGMFLFRA ARKLRQFLKM NSTGDFDLHL LKVSEGTTIL LNCTGQVKGR
 KPAALGEAQP TKSLEENKSL KEQKLLNDLC FLKRLLEQEI TCWNKILMGT KEH

SOURCE

HEK293 cells

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 (<1EU/μg).

AUTHENTICITY

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

CROSS REACTIVITY

Bacteria, Human, Human + Mouse, Human + Virus, Leech, Monkey, Mouse, Rabbit, Rat

BIOACTIVITY

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

RESEARCH AREAS

Inflammation, Stem Cells & Differentiation, Cancer

RECONSTITUTION

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

REFERENCES

Cella, M. Expansion of human NK-22 cells with IL-7, IL-2, and IL-1beta reveals intrinsic functional plasticity. 2010. Proceedings of the National Academy of Sciences of the USA; 107(24):10961-6. Hanson, M.G. Cyclic AMP Elevation Is Sufficient to Promote the Survival of Spinal Motor Neurons In Vitro. 1998. The Journal of Neuroscience; 18(18):7361-7371.

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