

**TECHNICAL DATA SHEET**

# Recombinant Human IL-1 $\alpha$ (Carrier-free)

Catalog Number: 21-8019

**RPx-Pro™ Recombinant Protein**

**PRODUCT INFORMATION**

**CONTENTS**

Recombinant Human IL-1 $\alpha$  (Carrier-free)

**DESCRIPTION**

IL-1 alpha, a member of the IL-1 family, is a non-secreted proinflammatory cytokine involved in the promotion of fever and sepsis. This cytokine is primarily produced by activated macrophages in addition to neutrophils, epithelial and endothelial cells. It is known to induce proliferation in vascular smooth muscle cells, it is involved in T cell activation, and it stimulates thymocyte proliferation.

**MOLECULAR MASS**

Recombinant Human IL-1 $\alpha$  is a 18.0 kDa protein composed 159 amino acid residues.

**AMINO ACID SEQUENCE**

SAPFSFLSNV KYNFMRIIKY EFILNDALNQ SIIRANDQYL TAAALHNLDE AVKFDMGAYK SSKDDAKITV ILRISKTKQLY VTAQDEDEQPV LLKEMPEIPK TITGSETNLL FFWETHGTKN YFTSVAHPNL FIATKQDYWV CLAGGPPSIT DFQILENQA

**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/ $\mu$ g of protein (<1 EU/ $\mu$ g).

**AUTHENTICITY**

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

**CROSS REACTIVITY**

Cow, Monkey, Mouse

**BIOACTIVITY**

The ED<sub>50</sub> as determined by the dose-dependent stimulation of Mouse D10S cells is  $\leq$ 0.001 ng/ml, corresponding to a specific activity of  $\geq 1 \times 10^9$  units/mg.

**RESEARCH AREAS**

Cancer; Diabetes / Weight Regulation; Immune System; Inflammation; Neurobiology; Proliferation; Stem Cells & Differentiation; Wound Healing; Transplantation

**RECONSTITUTION**

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

**REFERENCES**

March CJ, B Mosley, A Larsen, DP Cerretti, G Braedt, V Price, S Gillis, CS Henney, SR Kronheim, K Grabstein, et al 1985 Nature 315(6021): 641–647.  
Nicklin MJ, A Weith, and GW Duff 1994 Genomics 19(2): 382–384. Bankers-Fulbright JL, KR Kalli, and DJ McKean 1996 Life Sci 59(2): 61–83. Dinarello CA 1997 Semin Oncol 24 (3 Suppl 9): S9–81–S9–93.

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