

# Recombinant human IL-1 alpha/IL1A protein

Catalog Number: ATGP3864

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

113-271aa

### UniProt No.

P01583

### NCBI Accession No.

NP\_000566

### Alternative Names

Interleukin 1 alpha, preinterleukin 1 alpha, Hematopoietin-1, Pro-interleukin-1-alpha, IL1F1, IL-1A, IL1-ALPHA, IL1

## PRODUCT SPECIFICATION

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### Molecular Weight

22.4 kDa (197aa) confirmed by MALDI-TOF

### Concentration

1mg/ml (determined by absorbance at 280nm)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 7.5) containing 10% glycerol

### Purity

> 90% by SDS-PAGE

### Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

### Biological Activity

Measured in a cell proliferation assay using D10.G4.1 mouse helper T cell. The ED50 for this effect is less or equal to 0.04ng/ml.

### Tag

His-Tag

### Application

SDS-PAGE, Bioactivity

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

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# Recombinant human IL-1 alpha/IL1A protein

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## Description

IL-1 consists of two distinct forms, IL-1 alpha and IL-1 beta which perform the same functions but are distinct proteins. IL-1alpha is a pleiotropic cytokine involved in various immune responses, inflammatory processes, and hematopoiesis. This cytokine is also temporarily upregulated during bone formation and the menstrual cycle and can be induced in response to nervous system stimulation. Recombinant human IL-1alpha was expressed in E.coli and purified by using conventional chromatography techniques.

## Amino acid Sequence

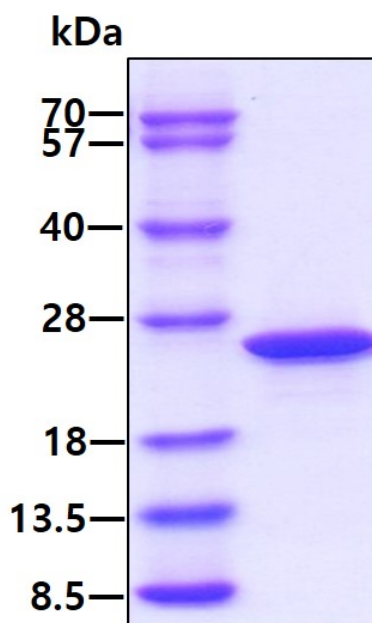
<MRGSHHHHHH GMASMTGGQ MGRDLYDDDD KDRWGSHM>SA PFSFLSNVKY NFMRIIKYEF ILNDALNQSI  
IRANDQYLTA AALHNLDEAV KFDMGAYKSS KDDAKITVIL RISKTQLYVT AQDEDQPVLL KEMPEIPKTI TGSETNLLFF  
WETHGTKNYF TSVAHPNLFI ATKQDYWVCL AGGPPSITDF QILENQA

## General References

Misener VL., et al. (2008). Neuropsychobiology. 58(2):71-80.  
Sarkar O., et al. (2008). Biol Reprod. 78(3):445-54.

## DATA

### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

### Biological Activity

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Human IL-1 alpha /IL-1F1 stimulates cell proliferation of the D10.G4.1 mouse helper T cell. The ED50 range is less or equal to 0.04 ng/ml.

