

# Recombinant rat IL-1 alpha/IL1A protein

Catalog Number: ATGP3846

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

115-270aa

### UniProt No.

P16598

### NCBI Accession No.

NP\_058715

### Alternative Names

Interleukin-1 alpha precursor, Interleukin-1 alpha, IL1F1, IL-1A, IL-1 alpha

## PRODUCT SPECIFICATION

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### Molecular Weight

20.2 kDa (179aa) confirmed by MALDI-TOF

### Concentration

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

### Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

### Purity

> 95% 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 range  $\leq$  20 pg/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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### Description

IL-1 alpha also known as interleukin-1 alpha. IL-1 alpha belongs to the interleukin 1 cytokine family. IL-1 alpha is

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part of Interleukin-1. IL1 stimulates thymocyte proliferation by inducing IL2 release, B-cell maturation and proliferation, and fibroblast growth factor activity. IL1 proteins are involved in the inflammatory response, especially IL1A is an early and important mediator of inflammation after injury. Recombinant rat IL1A, fused to His-tag at N-terminus was expressed in E. coli and purified by using conventional chromatography techniques.

## Amino acid Sequence

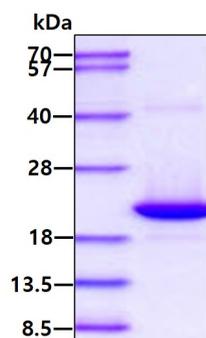
<MGSSHHHHHH SSGLVPRGSH MGS>SAPHSFQ NNLRYKLIRI VKQEFIMNDS LNQNIYVDMD RIHLKAASLN  
DLQLEVKFDM YAYSSGGDDSKYPVTLKVSN TQLFVSAQGE DKPVLLKEIP ETPKLITGSE TDLIFFWEKI NSKNYFTSAA  
FPELLIATKE QSQVHLARGL PSMIDFQIS

## General References

Brough D., et al. (2015) IUBMB Life. doi: 10.1002  
Hermann E., et al. (1985) Z Rheumatol. 44(5): 207-12.

## DATA

### SDS-PAGE



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

### Biological Activity

Rat IL-1 alpha in a cell proliferation assay using D10.G4.1 mouse helper T cell. The ED50 range  $\leq$  20 pg/ml.

