

# Recombinant human IL-1 beta/IL1B protein

Catalog Number: ILB0701

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

117-269aa

### UniProt No.

P01584

### NCBI Accession No.

NP\_000567.1

### Alternative Names

Interleukin-1 beta, IL-1 beta, Catabolin, IL1F2

## PRODUCT SPECIFICATION

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### Molecular Weight

17 kDa (154aa) confirmed by MALDI-TOF

### Concentration

1mg/ml (determined by BCA assay)

### Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4)

### 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 cells. The ED50 range  $\leq$  12pg/ml.

### Tag

Non-Tagged

### 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

Interleukin-1 (IL-1) has been considered a potentially important inflammatory mediator. It is composed of two

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distinct proteins, called as IL-1alpha and IL-1beta. IL-1beta is a proinflammatory cytokine produced in a variety of cells including monocytes, tissue macrophages, keratinocytes and other epithelial cells. Both IL-1alpha and IL-1beta bind to the same receptor and they are structurally related polypeptides that share approximately 20% amino acid. Recombinant human IL-1beta was expressed in E. coli and purified by using conventional chromatography techniques.

## Amino acid Sequence

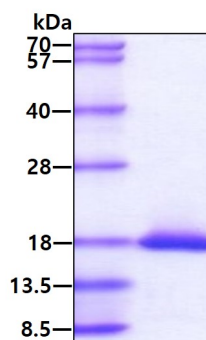
MAPVRSLNCT LRDSQQKSLV MSGPYELKAL HLOGQDMEQQ VVFSMSFVQG EESNDKIPVA LGLKEKNLYL SCVLKDDKPT LQLESVDPKN YPKKKMEKRF VFNKIEINNK LEFESAQFPN WYISTSQAEN MPVFLGGTKG QDITDFTMQ FVSS

## General References

Allan SM., et al. (2005), Nat. Rev. Immunol. 5:629.  
Michaud DS., et al. (2006), Cancer Res.66(8):4525-30

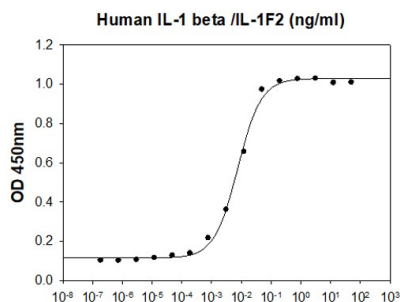
## DATA

### SDS-PAGE



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

### Biological Activity



Human IL-1 beta /IL-1F2 stimulates cell proliferation of the D10.G4.1 mouse helper T cells. The ED50 range  $\leq$  12 pg/ml.