

Datasheet for ABIN6699996

**IL-1 beta Protein****1** Image[Go to Product page](#)

## Overview

Quantity:	10 µg
Target:	IL-1 beta (IL1B)
Origin:	Rat
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Application:	SDS-PAGE (SDS)

## Product Details

Purpose:	Rat Interleukin-1 beta Recombinant Protein
Purification:	Interleukin-1 beta purity was determined to be greater than 97% as determined by HPLC, analysis by UV-Spectroscopy at 280nm, and by reducing and non-reducing SDS-pAGE.
Purity:	97,00%
Endotoxin Level:	Measured by LAL is typically ≤ 1 EU/µg protein.
Biological Activity Comment:	The activity is determined by the dose-dependent proliferation of mouse D10S cells and is typically less than 1 ng/mL.

## Target Details

Target:	IL-1 beta (IL1B)
Alternative Name:	Il1b ( <a href="#">IL1B Products</a> )
Background:	Synonyms: Catabolin, LAF, EP, LEM, MCF Background: Interleukin-1 beta (IL-1β) is a pro-inflammatory cytokine, produced in response to

## Target Details

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inflammatory agents by a variety of cells, including, monocytes, macrophages, and dendritic cells (DCs). IL-1 $\beta$  and IL-1 $\alpha$  are two distinct and independently regulated gene products that comprise IL-1 and signal through the Type 1 IL-1 receptor (IL-1R1). Although IL-1 $\alpha$  is cell associated and IL-1 $\beta$  is secreted, they have nearly identical biological activity in that they induce adhesion molecule expression on epithelial cells, control fever induction, and play a role in arthritis and septic shock. Signaling activated by the IL-1R1 promotes these activities through a MYD88 signaling pathway similar to those associated with Toll receptors. Recombinant rat IL-1 $\beta$  is a non-glycosylated protein, containing 152 amino acids, with a molecular weight of 17.3 kDa.

UniProt: [Q63264](#)

Pathways: [NF-kappaB Signaling](#), [Interferon-gamma Pathway](#), [TLR Signaling](#), [Negative Regulation of Hormone Secretion](#), [Cellular Response to Molecule of Bacterial Origin](#), [Carbohydrate Homeostasis](#), [Glycosaminoglycan Metabolic Process](#), [Myometrial Relaxation and Contraction](#), [Regulation of Leukocyte Mediated Immunity](#), [Positive Regulation of Immune Effector Process](#), [Autophagy](#), [Cancer Immune Checkpoints](#), [Inflammasome](#)

## Application Details

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Application Notes: Other: User Optimized  
Application\_Note: Interleukin-1-beta Recombinant Protein has been tested by SDS-PAGE and biological activity and is suitable as a control for polyclonal or monoclonal anti-Interleukin-1-beta in immunological assays.

Comment: Suggested\_Applications: Cellular Assay  
Other\_Performance\_Data:

Restrictions: For Research Use only

## Handling

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Format: Lyophilized

Reconstitution: Reconstitution\_Buffer: Restore with deionized water (or equivalent)  
Reconstitution\_Volume: 10  $\mu$ L (10-100  $\mu$ L)

Buffer: Buffer: 0.01 M Sodium Phosphate, pH 7.5  
Stabilizer: None

Preservative: Without preservative

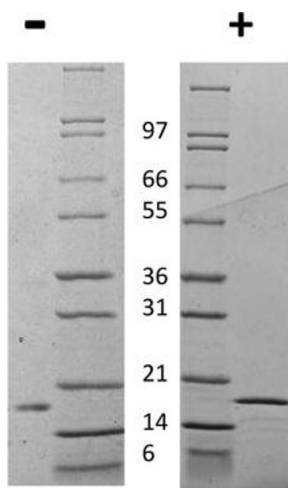
## Handling

Storage: 4 °C, -20 °C

Storage Comment: Store vial at 4° C prior to restoration. Dilute only prior to immediate use. Maintain sterility. This product DOES NOT contain preservative. DO NOT VORTEX. We recommend adding a carrier protein such as HSA or BSA to 0.1% (i.e. 1.0 mg/mL). For best results aliquot contents and freeze at -20° C or colder. Avoid cycles of freezing and thawing. Centrifuge vial before each opening to dislodge contents from the cap and to clarify if contents are not clear after standing at room temperature.

Expiry Date: 6 months

## Images



### SDS-PAGE

**Image 1.** SDS-PAGE of Rat Interleukin-1 beta Recombinant Protein SDS-PAGE of Rat Interleukin-1-beta Recombinant Protein. Lane 1: 1 µg Rat IL-1 Beta in non-reducing conditions . Lane 2: Molecular weight marker. Lane 3: 1 µg Rat IL-1 Beta in reducing conditions (+). Lane 4: Molecular weight marker. Rat IL-1 Beta has a predicted MW of 17.3 kDa.