

Datasheet for ABIN6239741

**IL-1 beta Protein (AA 117-269) (His tag)****2** Images[Go to Product page](#)

## Overview

Quantity:	50 µg
Target:	IL-1 beta (IL1B)
Protein Characteristics:	AA 117-269
Origin:	Human
Source:	HEK-293 Cells
Biological Activity:	Active
Purification tag / Conjugate:	This IL-1 beta protein is labelled with His tag.
Application:	Activity Assay (AcA), Cell Culture (CC)

## Product Details

Characteristics:	Tag location: N-terminal His Tag
Purity:	> 95 %
Biological Activity Comment:	<p>Interleukin-1 beta belongs to the interleukin 1 cytokine family, which plays a critical role in inflammation, immunity, antiviral responses, and a variety of diseases. It has been reported that IL-1<math>\beta</math>-induced IL-6 production is mediated by both PI3K and IRAK4 in A549 cells. To test the bioactivity of IL-1<math>\beta</math>, A549 cells were seeded into 24-well plate at a density of 1x10<sup>5</sup> cells/mL, and allowed to attach overnight before treated with or without certain concentrations (1ng/mL, 10ng/mL) of IL1-<math>\beta</math> for 4h and IL-6 levels in the cell supernatant were determined by ELISA. IL-6 levels in the cell supernatant of A549 cells increased significantly after stimulated with IL1-<math>\beta</math>, the data was shown in Table 1 and Figure 1. Sample O.D. value Corrected Concentration of IL-6(cell supernatant of A549 cells) (ng/mL) stimulated with IL-1<math>\beta</math>(1ng/mL) 1.04 0.975 61.71 stimulated with IL-1<math>\beta</math>(10ng/mL) 0.966 0.901 56.77 unstimulated 0.309 0.244 12.44 Table 1. IL-6</p>

## Product Details

levels in the cell supernatant of A549 cells up-regulated by IL1-β 80 60 40 20 0 0 1 10 rh IL-1β (ng/ml) Figure 1. IL-6 levels in the cell supernatant of A549 cells up-regulated by IL1-β.

## Target Details

Target:	IL-1 beta (IL1B)
Alternative Name:	Interleukin 1 Beta (IL1b) ( <a href="#">IL1B Products</a> )
Background:	Alternative Names: IL1-B, IL1-Beta, IL1F2, IL-1β, Interleukin-1 Family Member 2, Catabolin
Molecular Weight:	22kDa
UniProt:	<a href="#">P01584</a>
Pathways:	<a href="#">NF-kappaB Signaling</a> , <a href="#">Interferon-gamma Pathway</a> , <a href="#">TLR Signaling</a> , <a href="#">Negative Regulation of Hormone Secretion</a> , <a href="#">Cellular Response to Molecule of Bacterial Origin</a> , <a href="#">Carbohydrate Homeostasis</a> , <a href="#">Glycosaminoglycan Metabolic Process</a> , <a href="#">Myometrial Relaxation and Contraction</a> , <a href="#">Regulation of Leukocyte Mediated Immunity</a> , <a href="#">Positive Regulation of Immune Effector Process</a> , <a href="#">Autophagy</a> , <a href="#">Cancer Immune Checkpoints</a> , <a href="#">Inflammasome</a>

## Application Details

Application Notes:	Isoelectric Point: 5.9
Restrictions:	For Research Use only

## Handling

Format:	Lyophilized
Buffer:	20 mM Tris, 150 mM NaCl, pH 8.0, containing 1 mM EDTA, 1 mM DTT, 0.01 % SKL, 5 % Trehalose and Proclin300.
Preservative:	Dithiothreitol (DTT), Other preservative, ProClin
Precaution of Use:	This product contains ProClin and Dithiothreitol (DTT): POISONOUS AND HAZARDOUS SUBSTANCES which should be handled by trained staff only.

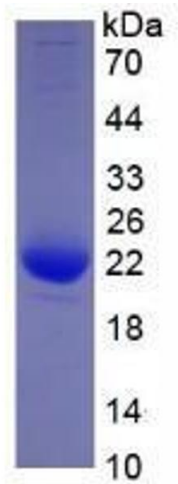


Image 1.

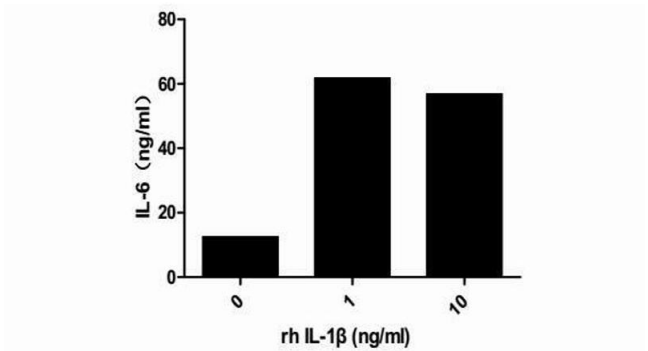


Figure 1. IL-6 levels in the cell supernatant of A549 cells up-regulated by IL1-β.

**Image 2.** Interleukin-1 beta belongs to the interleukin 1 cytokine family, which plays a critical role in inflammation, immunity, antiviral responses, and a variety of diseases. It has been reported that IL-1β-induced IL-6 production is mediated by both PI3K and IRAK4 in A549 cells. To test the bioactivity of IL-1β, A549 cells were seeded into 24-well plate at a density of 1x10<sup>5</sup> cells/mL, and allowed to attach overnight before treated with or without certain concentrations (1ng/mL, 10ng/mL) of IL1-β for 4h and IL-6 levels in the cell supernatant were determined by ELISA. IL-6 levels in the cell supernatant of A549 cells increased significantly after stimulated with IL1-β, the data was shown in Table 1 and Figure 1.