

# Recombinant Mouse interleukin 1 beta Protein, His&Flag tagged

Cat. No. II1b-125M Lot. No. (See product label)

## SPECIFICATION

### Product Overview

Recombinant mouse IL-1 beta/IL1B protein (P10749) (Val 118-Ser 269) with both His, Flag tag at the C-terminus was expressed in E. coli.

### Species

Mouse

### Source

E.coli

### ProteinLength

118-269aa

### Description

Potent pro-inflammatory cytokine. Initially discovered as the major endogenous pyrogen, induces prostaglandin synthesis, neutrophil influx and activation, T-cell activation and cytokine production, B-cell activation and antibody production, and fibroblast proliferation and collagen production. Promotes Th17 differentiation of T-cells. Synergizes with IL12/interleukin-12 to induce IFNG synthesis from T-helper 1 (Th1) cells. Plays a role in angiogenesis by inducing VEGF production synergistically with TNF and IL6. Involved in transduction of inflammation downstream of pyroptosis: its mature form is specifically released in the extracellular milieu by passing through the gasdermin-D (GSDMD) pore. IL1B production occurs in 2 steps, each being controlled by different stimuli. First, inflammatory signals, such as LPS, stimulate the synthesis and promote the accumulation of cytosolic stores of pro-IL1B (priming). Then additional signals are required for inflammasome assembly, leading to CASP1 activation, pro-IL1B processing and eventually secretion of the active cytokine. IL1B processing and secretion are temporarily associated.

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<b>Tag</b>	C-His&Flag
<b>Molecular Mass</b>	20.7 kDa
<b>Endotoxin</b>	Less than 1.0 EU/μg by the LAL method.
<b>Purity</b>	>95% as determined by SDS-PAGE.
<b>Storage</b>	Please avoid repeated freeze-thaw cycles. Samples are stable for up to twelve months from date of receipt at -20 to -80 centigrade. It is recommended that aliquot the reconstituted solution to minimize freeze-thaw cycles.
<b>Storage Buffer</b>	Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4, 5% Trehalose, 5% mannitol.
<b>Reconstitution</b>	Reconstitute at 250 μg/mL in sterile water.

## GENE INFORMATION

<b>Gene Name</b>	Il1b interleukin 1 beta [ <a href="#">Mus musculus (house mouse)</a> ]
<b>Official Symbol</b>	<a href="#">Il1b</a>
<b>Synonyms</b>	IL1B; interleukin 1 beta; interleukin-1 beta; IL-1 beta; Il-1b; IL-1beta;
<b>Gene ID</b>	<a href="#">16176</a>
<b>mRNA Refseq</b>	<a href="#">NM_008361</a>
<b>Protein Refseq</b>	<a href="#">NP_032387</a>

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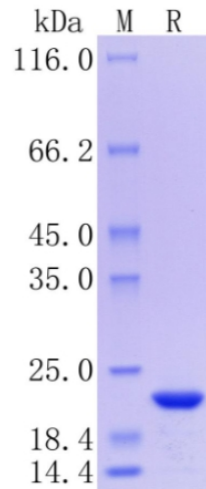
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UniProt ID

P10749

Protein on SDS-PAGE under reducing (R) condition.



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