

## Recombinant Cattle IL1B Protein, His-tagged

Cat. No. IL1B-1022C    Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant Cattle IL1B Protein (Ile109-Val251) with His tag was expressed in E. coli.
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<b>Species</b>	Cattle
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<b>Source</b>	E.coli
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<b>ProteinLength</b>	Ile109-Val251
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#### Description

The protein encoded by this gene is a member of the interleukin 1 cytokine family. This cytokine is produced by activated macrophages as a proprotein, which is proteolytically processed to its active form by caspase 1 (CASP1/ICE). This cytokine is an important mediator of the inflammatory response, and is involved in a variety of cellular activities, including cell proliferation, differentiation, and apoptosis. The induction of cyclooxygenase-2 (PTGS2/COX2) by this cytokine in the central nervous system (CNS) is found to contribute to inflammatory pain hypersensitivity. Similarly, IL-1B has been implicated in human osteoarthritis pathogenesis. Patients with severe Coronavirus Disease 2019 (COVID-19) present elevated levels of pro-inflammatory cytokines such as IL-1B in bronchial alveolar lavage fluid samples. The lung damage induced by the Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is to a large extent, a result of the inflammatory response promoted by cytokines such as IL-1B. This gene and eight other interleukin 1 family genes form a cytokine gene cluster on chromosome 2.

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<b>Form</b>	Freeze-dried powder
<b>Molecular Mass</b>	Predicted Molecular Mass: 20.4 kDa
<b>Purity</b>	> 95%
<b>Applications</b>	Positive Control; Immunogen; SDS-PAGE; WB.
<b>Stability</b>	The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 centigrade for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.
<b>Storage</b>	Avoid repeated freeze/thaw cycles. Store at 2-8 centigrade for one month. Aliquot and store at -80 centigrade for 12 months.
<b>Storage Buffer</b>	PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
<b>Reconstitution</b>	Reconstitute in PBS or others.

## GENE INFORMATION

<b>Gene Name</b>	IL1B interleukin 1 beta [ Bos taurus (cattle) ]
<b>Official Symbol</b>	IL1B
<b>Synonyms</b>	IL1B; interleukin 1 beta; interleukin-1 beta; IL-1 beta;
<b>Gene ID</b>	281251
<b>mRNA Refseq</b>	NM_174093

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**Protein Refseq** NP\_776518

**UniProt ID** P09428

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