

Recombinant Cattle IL1B Protein, His-tagged

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

SPECIFICATION

Product Overview	Recombinant Cattle IL1B Protein (Ile109-Val251) with His tag was expressed in E. coli.
Species	Cattle
Source	E.coli
ProteinLength	Ile109-Val251
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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Form	Freeze-dried powder
Molecular Mass	Predicted Molecular Mass: 20.4 kDa
Purity	> 95%
Applications	Positive Control; Immunogen; SDS-PAGE; WB.
Stability	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.
Storage	Avoid repeated freeze/thaw cycles. Store at 2-8 centigrade for one month. Aliquot and store at -80 centigrade for 12 months.
Storage Buffer	PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
Reconstitution	Reconstitute in PBS or others.

GENE INFORMATION

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

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Protein Refseq	NP_776518
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UniProt ID	P09428
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