

## Product datasheet for **AR09047PU-N**

### Interleukin-1 beta / IL-1B (117-269) Human Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Interleukin-1 beta / IL-1B (117-269) human recombinant protein, 0.1 mg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	MAPVRSLNCT LRDSQQKSLV MSGPYELKAL HLQGQDMEQQ VVFSMSFVQG EESNDKIPVA LGLKEKNLYL SCVLKDDKPT LQLESVDPKN YPKKKMEKRF VFNKIEINNK LEFESAQFPN WYISTSQAEN MPVFLGGTKG GQDITDFTMQ FVSS
Concentration:	lot specific
Purity:	>95% >= 95% by SDS PAGE
Buffer:	Presentation State: Purified State: E. coli Buffer System: PBS, pH 7.4
Preparation:	E. coli
Protein Description:	Recombinant human IL-1 $\beta$ was expressed in E.coli and purified by using conventional chromatography techniques.
Storage:	Store (in aliquots) at -20°C. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
RefSeq:	<a href="#">NP_000567</a>
Locus ID:	3553
UniProt ID:	<a href="#">P01584</a>
Cytogenetics:	2q14.1
Synonyms:	IL-1; IL1-BETA; IL1beta; IL1F2



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**Summary:**

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. [provided by RefSeq, Jul 2020]

**Protein Families:**

Druggable Genome, Secreted Protein

**Protein Pathways:**

Alzheimer's disease, Apoptosis, Cytokine-cytokine receptor interaction, Cytosolic DNA-sensing pathway, Graft-versus-host disease, Hematopoietic cell lineage, MAPK signaling pathway, NOD-like receptor signaling pathway, Prion diseases, Toll-like receptor signaling pathway, Type I diabetes mellitus

**Product images:**