

Product datasheet for **TP721175**

IL1 beta (IL1B) (NM_000576) Human Recombinant Protein

Product data:

| | |
|---------------------------------------|---|
| Product Type: | Recombinant Proteins |
| Description: | Purified recombinant protein of Human interleukin 1, beta (IL1B) |
| Species: | Human |
| Expression Host: | E. coli |
| Expression cDNA Clone or AA Sequence: | Met1-Leu586 |
| Tag: | Tag Free |
| Predicted MW: | 17.4 kDa |
| Concentration: | lot specific |
| Purity: | >95% as determined by SDS-PAGE and Coomassie blue staining |
| Buffer: | Supplied as a 0.2 um filtered solution of 10mM HEPES, pH 7.4. |
| Endotoxin: | Endotoxin level is < 0.1 ng/μg of protein (< 1 EU/μg) |
| Storage: | Store at < -20°C, stable for 6 months after receipt. Please minimize freeze-thaw cycles. |
| Stability: | Stable for at least 6 months from date of receipt under proper storage and handling conditions. |
| RefSeq: | NP_000567 |
| Locus ID: | 3553 |
| UniProt ID: | P01584 |
| RefSeq Size: | 1498 |
| Cytogenetics: | 2q14.1 |
| RefSeq ORF: | 807 |
| 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