

ARG70028
Human IL1 beta recombinant protein (Active) (His-tagged, C-ter)Package: 100 µg, 20 µg
Store at: -20°C

Summary

Product Description	E. coli expressed, His-tagged (C-ter) Active Human IL1 beta recombinant protein
Tested Application	SDS-PAGE
Target Name	IL1 beta
Species	Human
A.A. Sequence	Ala117 - Ser269
Expression System	E. coli
Activity	Active
Activity Note	Determined by its ability to induce IL-8 secretion in HT29 cells. The ED50 for this effect is less than 2.0 ng/mL. The specific activity of recombinant human IL-1 beta is approximately $>3 \times 10^7$ IU/mg.
Alternate Names	Interleukin-1 beta; IL1-BETA; IL-1; IL-1 beta; Catabolin; IL1F2

Properties

Form	Powder
Purification Note	Endotoxin level is 98% (by SDS-PAGE)
Buffer	PBS (pH 8.0)
Reconstitution	It is recommended to reconstitute the lyophilized protein in sterile water to a concentration not less than 200 µg/mL and incubate the stock solution for at least 20 min at room temperature to make sure the protein is dissolved completely.
Storage instruction	For long term, lyophilized protein should be stored at -20°C or -80°C. After reconstitution, aliquot and store at -20°C or -80°C for up to one month. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	IL1B
Gene Full Name	interleukin 1, beta
Background	IL1 beta protein 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. This gene and eight other interleukin 1 family genes form a cytokine gene cluster on chromosome 2. [provided by RefSeq, Jul 2008]
Function	IL1 beta is a potent proinflammatory 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 (PubMed:10653850). [UniProt]

Highlight

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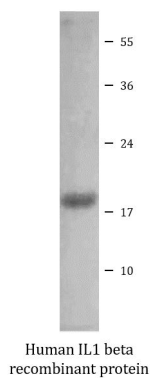
PTM

Activation of the IL1B precursor involves a CASP1-catalyzed proteolytic cleavage. Processing and secretion are temporarily associated. [UniProt]

Cellular Localization

Cytoplasm, cytosol. Lysosome. Secreted, exosome. [UniProt]

Images



ARG70028 Human IL1 beta recombinant protein (Active) (His-tagged, C-ter) SDS-PAGE image

SDS-PAGE analysis of ARG70028 Human IL1 beta recombinant protein (Active) (His-tagged, C-ter).