

## 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 Reactivity	Hu
Tested Application	SDS-PAGE
Target Name	IL1 beta
Species	Human
Species	Human
A.A. Sequence	MASAP VRSLN CTRLD SQQKS LVMSG PYELK ALHLQ GQDME QQVVF SMSFV QGEES NDKIP VALGL KEKNL YLSCV LKDDK PTLQL ESVPD KNYPK KKMEK RFVFN KIEIN NKLEF ESAQF PNWYI STSQA ENMPV FLGGT KGGQD ITDFT MQFVS S with polyhistidine tag at the C-terminus.
Expression System	E. coli
Activity	Active
Activity Note	Determined by its ability to induce proliferation in D10.G4.1 cells. The ED50 for this effect is $1.5 \times 10^8$ IU/mg. Determined by its ability to induce IL-8 secretion in HT29 cells. The ED50 for this effect is 1.8-5.1 ng/mL.
Alternate Names	Interleukin-1 beta; IL1-BETA; IL-1; IL-1 beta; Catabolin; IL1F2

### Properties

Form	Powder
Purification	Ni-NTA chromatography.
Purification Note	Endotoxin level is less than 0.1 EU/µg of the protein, as determined by the LAL test.
Purity	> 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 100 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	Lyophilized protein should be stored at -20°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

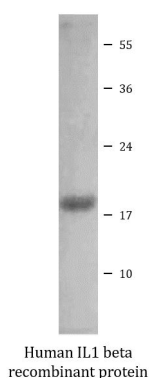
Gene Symbol	IL1B
Gene Full Name	interleukin 1, beta
Background	IL1 beta protein is a member of the interleukin 1 cytokine family. This cytokine is produced by activated macrophages as a proprotein, which is proteolytically processed to its active form by caspase 1

(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	Related products: <a href="#">IL1 beta antibodies</a> ; <a href="#">IL1 beta ELISA Kits</a> ; <a href="#">IL1 beta Duos / Panels</a> ; <a href="#">IL1 beta recombinant proteins</a> ; Related news: <a href="#">HMGB1 in inflammation</a> <a href="#">Inflammatory Cytokines</a> <a href="#">Exploring Antiviral Immune Response</a> <a href="#">RIP1 activation and pathogenesis of NASH</a>
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

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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).