ARG70202
Pig 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 Pig IL1 beta recombinant protein
Tested Application	SDS-PAGE
Target Name	IL1 beta
Species	Pig
A.A. Sequence	Ala115 - Pro267
Expression System	E. coli
Activity	Active
Activity Note	Determined by its ability to induce D10.G4.1 cells proliferation. The ED50 for this effect is < 3 ng/mL.
Alternate Names	Interleukin-1 beta; IL1-BETA; IL-1; IL-1 beta; Catabolin; IL1F2

Properties

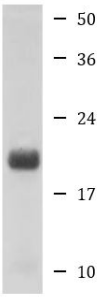
Form	Powder
Purification Note	Endotoxin level is less than 0.1 EU/µg of the protein, as determined by the LAL test.
Purity	> 98% (by SDS-PAGE)
Buffer	PBS (pH 7.4)
Reconstitution	It is recommended to reconstitute the lyophilized protein in sterile water to a concentration not less than 200 µg/mL and incubate 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	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. This gene and eight other interleukin 1 family genes form a cytokine gene cluster on chromosome 2. [provided by RefSeq, Jul 2008]
Function	Produced by activated macrophages, IL-1 stimulates thymocyte proliferation by inducing IL-2 release, B-

	cell maturation and proliferation, and fibroblast growth factor activity. IL-1 proteins are involved in the inflammatory response, being identified as endogenous pyrogens, and are reported to stimulate the release of prostaglandin and collagenase from synovial cells. [UniProt]
Highlight	Related products: IL1 beta antibodies; IL1 beta ELISA Kits; IL1 beta Duos / Panels; IL1 beta recombinant proteins; Related news: HMGB1 in inflammation Inflammatory Cytokines Exploring Antiviral Immune Response RIP1 activation and pathogenesis of NASH
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. Secreted. Note=The precursor is cytosolic. [UniProt]

Images



Pig IL1 beta recombinant protein

ARG70202 Pig IL1 beta recombinant protein (Active) (His-tagged, C-ter) SDS-PAGE image

SDS-PAGE analysis of ARG70202 Pig IL1 beta recombinant protein (Active) (His-tagged, C-ter).