

Human CellExp™ IL-1 beta / IL-1F2, Human recombinant

IL1B, IL-1BETA, IL1F2, IL-1β, Catabolin Catalog # PBV11496r

Specification

Human CellExp™ IL-1 beta / IL-1F2, Human recombinant - Product info

Primary Accession P01584

Calculated MW The protein has a calculated MW of 17.5

kDa. The predicted N-terminus is Met. The reducing protein migrates as 18 kDa in

SDS-PAGE. KDa

Human CellExp™ IL-1 beta / IL-1F2, Human recombinant - Additional Info

Gene ID **3553**

Other Names

IL1B, IL-1BETA, IL1F2, IL-1β, Catabolin

Gene Source Human

Source HEK 293 cells Assay&Purity SDS-PAGE;≥ 97%

Recombinant Yes

Target/Specificity

IL1B

Application Notes

Reconstitute in sterile PBS, pH 7.4 to a concentration of 50 µg/ml

Format

Lyophilized

Storage

 -20° C;Lyophilized from 0.22 µm filtered solution in PBS, pH 7.4. Normally Mannitol or Trehalose is added as protectants before lyophilization.

Human CellExp™ IL-1 beta / IL-1F2, Human recombinant - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Human CellExp™ IL-1 beta / IL-1F2, Human recombinant - Images





Human CellExp™ IL-1 beta / IL-1F2, Human recombinant - Background

Interleukin-1 beta (IL-1\beta) is also known as catabolin, is a cytokine protein that in humans is encoded by the IL1B gene. IL-1 β precursor is cleaved by caspase 1 (interleukin 1 beta convertase). Cytosolic thiol protease cleaves the product to form mature IL-1 beta. IL1\(\beta \) are structurally related polypeptides that share approximately 21% amino acid (aa) identity in human. Both proteins are produced by a wide variety of cells in response to inflammatory agents, infections, or microbial endotoxins. While IL1α and IL1β are regulated independently, they bind to the same receptor and exert identical biological effects. IL-1\(\beta\) 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.