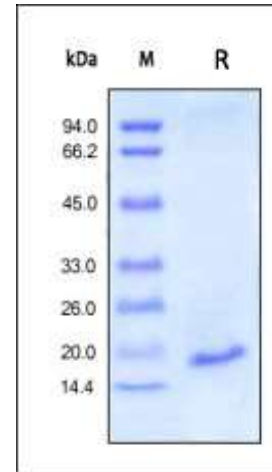


Human CellExp™ IL-1 beta / IL-1F2, Human recombinant

CATALOG NO:	P1019-10 P1019-25	10 µg 25 µg
ALTERNATE NAMES:	IL1B, IL-1BETA, IL1F2, IL-1β, Catabolin	
SOURCE:	HEK 293 cells (Ala 117 - Ser 269)	
PURITY:	> 97% by SDS – PAGE	
MOL. WEIGHT:	Human IL-1 beta, contains no "tag", and has a calculated MW of 17.5 kDa. The predicted N-terminus is Met. The reducing protein migrates as 18 kDa in SDS-PAGE.	
ENDOTOXIN LEVEL:	< 1.0 EU per 1µg of protein (determined by LAL method)	
FORM:	Lyophilized	
FORMULATION:	Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Generally Mannitol or Trehalose is added as a protectant before lyophilization.	
STORAGE CONDITIONS:	Store at -20°C. After reconstitution, aliquot and store at -20°C and use within 3 months. Avoid repeated freezing and thawing cycles.	
RECONSTITUTION:	Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4 to a concentration of 50 µg/ml. Do not vortex. This solution can be stored at 2-8°C for up to 1 month. For extended storage, it is recommended to store at -20°C.	
DESCRIPTION:	Interleukin-1 beta (IL-1β) is also known as catabolin, is a cytokine protein that in humans is encoded by the IL1B gene. IL-1β precursor is cleaved by caspase 1 (interleukin 1 beta convertase). Cytosolic thiol protease cleaves the product to form mature IL-1 beta. IL1β 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-1β 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	



Human IL-1 beta, Tag Free on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 97%

BIOACTIVITY: The bio-activity was determined by dose-dependent stimulation of the proliferation of mouse D10.G4.1 cells. The ED50 < 2 pg/mL, corresponding to a specific activity of >500,000,000 Unit/mg.

RELATED PRODUCT:

- IL-1β (human) ELISA Kit (**Cat. No. K4794-100**)
- IL-1β (mouse) ELISA Kit (**Cat. No. K4795-100**)
- IL-1β (rat) ELISA Kit (**Cat. No. K4796-100**)
- IL-1 Beta Antibody (**Cat. No. 5128G-100**)
- IL-1 beta Antibody (**Cat. No. 5128-100**)
- IL-1 beta Antibody (**Cat. No. 6483-10**)
- IL-1 beta, rat recombinant (**Cat. No. 4130-50**)

FOR RESEARCH USE ONLY! Not to be used on humans.