

Product datasheet for DA3558S

Interleukin-1 beta / IL-1B Human Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Interleukin-1 beta / IL-1B human recombinant protein, 2 µg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	APVRSLNCTL RDSQQKSLVM SGPYELKALH LQGQDMEQQV VFSMSFVQGE ESNDKIPVAL GLKEKNLYLS CVLKDDKPTL QLESVDPKNY PKKKMEKRFV FNKIEINNKL EFESAQFPNW YISTSQANMP VFLGGTKGGQ DITDFTMQFV SS
Predicted MW:	17 kDa
Purity:	>98% pure by SDS-PAGE and Silver stain
Buffer:	Presentation State: Purified State: Lyophilized purified protein Buffer System: PBS Stabilizer: None
Bioactivity:	Biological: Measured in a cell proliferation assay using murine D10G4.1 cells. The ED50 for this effect is typically 2-10 pg/ml.
Endotoxin:	< 0.1 ng per µg (IEU/µg) of rh IL-1beta
Reconstitution Method:	The lyophilized rh IL-1beta is soluble in water and most aqueous buffers. The lyophilized powder can be restored in water to a concentration of 0.1 mg/ml. This solution can be diluted into other buffered solutions or stored at -20°C for future use.
Preparation:	Lyophilized purified protein
Protein Description:	Recombinant Human Interleukin-1beta produced in E.Coli is a non-glycosylated, Interleukin-1 beta Polypeptide chain containing 153 amino acids and having a molecular mass of 17.0 kDa. Result by N-terminal sequencing: APVRSL and MAPVRS
Note:	Range: 0.1-10.0 ng/ml
Storage:	Store lyophilized at RT for 3 weeks or (preferably in a desiccator) at -20°C for longer. Following reconstitution store the antibody undiluted at 2-8°C for one week or (in aliquots) at -20°C for longer. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA) Avoid repeated freezing and thawing.



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Stability: Shelf life: one year from despatch.

RefSeq: [NP_000567](#)

Locus ID: 3553

UniProt ID: [P01584](#)

Cytogenetics: 2q14.1

Synonyms: IL-1 beta, IL1B, IL1 beta, IL1F2, Catabolin

Summary: 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. Similarly, IL-1B has been implicated in human osteoarthritis pathogenesis. Patients with severe Coronavirus Disease 2019 (COVID-19) present elevated levels of pro-inflammatory cytokines such as IL-1B in bronchial alveolar lavage fluid samples. The lung damage induced by the Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is to a large extent, a result of the inflammatory response promoted by cytokines such as IL-1B. This gene and eight other interleukin 1 family genes form a cytokine gene cluster on chromosome 2. [provided by RefSeq, Jul 2020]

Protein Families: Druggable Genome, Secreted Protein

Protein Pathways: Alzheimer's disease, Apoptosis, Cytokine-cytokine receptor interaction, Cytosolic DNA-sensing pathway, Graft-versus-host disease, Hematopoietic cell lineage, MAPK signaling pathway, NOD-like receptor signaling pathway, Prion diseases, Toll-like receptor signaling pathway, Type I diabetes mellitus

Product images:

