Datasheet for ABIN6964158

IL-1 beta Protein (AA 117-269) (Fc Tag)

2 Images

Go to Product page

Overview

Quantity:	100 µg
Target:	IL-1 beta (IL1B)
Protein Characteristics:	AA 117-269
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This IL-1 beta protein is labelled with Fc Tag.

Product Details

Purpose:	Recombinant Human IL1B Protein with C-terminal human Fc tag
Specificity:	IL1B (Ala117-Ser269) hFc (Glu99-Ala330)
Characteristics:	Extracellular Domain Protein
Purification:	Purified from cell culture supernatant by affinity chromatography
Purity:	The purity of the protein is greater than 95 % as determined by SDS-PAGE and Coomassie blue staining.

Target Details

Target:	IL-1 beta (IL1B)
Alternative Name:	IL1B (IL1B Products)
Background:	The protein encoded by this gene is a member of the interleukin 1 cytokine family. This cytokine

Target Details

	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]
Molecular Weight:	predicted molecular mass of 43.5 kDa after removal of the signal peptide.The apparent molecular mass of IL1B-hFc is 35-55 kDa due to glycosylation.
UniProt:	P01584
Pathways:	NF-kappaB Signaling, Interferon-gamma Pathway, TLR Signaling, Negative Regulation of Hormone Secretion, Cellular Response to Molecule of Bacterial Origin, Carbohydrate Homeostasis, Glycosaminoglycan Metabolic Process, Myometrial Relaxation and Contraction, Regulation of Leukocyte Mediated Immunity, Positive Regulation of Immune Effector Process, Autophagy, Cancer Immune Checkpoints, Inflammasome

Application Details

Restrictions:	For Research Use only

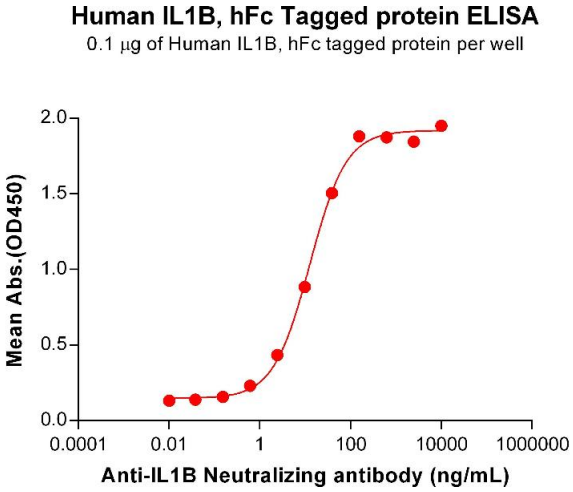
Handling

Format:	Lyophilized
Buffer:	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose is added as protectants before lyophilization.
Storage:	-20 °C,-80 °C
Storage Comment:	Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.

Handling

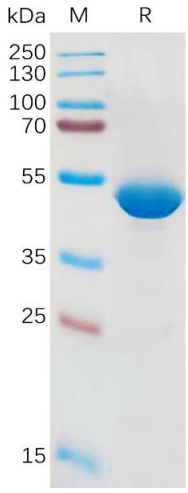
Expiry Date:	12 months

Images



ELISA

Image 1. ELISA plate pre-coated by 1 μg/mL (100 μL/well) Human IL1B Protein, hFc Tag (ABIN6964158, ABIN7042509 and ABIN7042510) can bind Anti-IL1B Neutralizing antibody ABIN7478012 and ABIN7490963 in a linear range of 0.61-156.25 ng/mL.



SDS-PAGE

Image 2. Human IL1B Protein, hFc Tag on SDS-PAGE under reducing condition.