

## ARG83337 Human IL1 beta ELISA Kit

Package: 96 wells  
Store at: 4°C; -20°C

### Component

Cat. No.	Component Name	Package	Temp
ARG83337-01	Antibody Coated Microplate	8 X 12 strips	4°C
ARG83337-02	Standard (Lyophilized)	3 vials	4°C
ARG83337-03	Standard / Sample Diluent Buffer	20 ml	4°C
ARG83337-04	100X Antibody Conjugate concentrate	120 µl	≤ -20°C
ARG83337-05	1000X HRP-Streptavidin concentrate	15 µl	4°C (protect from light)
ARG83337-06	Antibody Diluent Buffer	35 ml	4°C
ARG83337-07	10X Wash Buffer	50 ml	4°C
ARG83337-08	TMB Substrate	12 ml	4°C (protect from light)
ARG83337-09	Stop Solution	12 ml	Room temperature
ARG83337-10	Plate sealer	4 adhesive strips	Room temperature

### Summary

Product Description	ARG83337 Human IL1 beta ELISA Kit is an Enzyme Immunoassay kit for the quantification of Human IL1 beta in Serum, Plasma, Cell culture supernatants.
Tested Reactivity	Hu
Tested Application	ELISA
Specificity	No significant cross-reactivity or interference with Human IL-1 alpha; mouse IL-1 alpha, IL-1 beta; rat IL-1 alpha; porcine IL-1 alpha, IL-1 beta
Target Name	IL1 beta
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm
Sensitivity	3.9 pg/ml
Sample Type	Serum, Plasma, Cell culture supernatants
Standard Range	7.8 - 500 pg/ml
Sample Volume	50 µl
Precision	CV: less than 10%

Alternate Names Interleukin-1 beta; IL1-BETA; IL-1; IL-1 beta; Catabolin; IL1F2

## Application Instructions

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Assay Time 4 hours

## Properties

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Form 96 well

Storage instruction Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.

Note For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

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Gene Symbol IL1B

Gene Full Name interleukin 1, beta

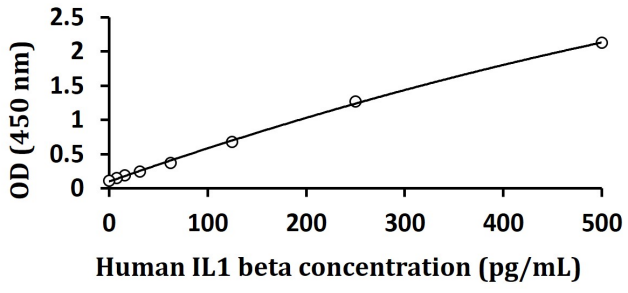
Background IL1 beta protein is a member of the interleukin 1 cytokine family. This cytokine is produced by activated macrophages as a proprotein, which is proteolytically processed to its active form by caspase 1 (CASP1/ICE). This cytokine is an important mediator of the inflammatory response, and is 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 IL1 beta is a potent proinflammatory cytokine. Initially discovered as the major endogenous pyrogen, induces prostaglandin synthesis, neutrophil influx and activation, T-cell activation and cytokine production, B-cell activation and antibody production, and fibroblast proliferation and collagen production. Promotes Th17 differentiation of T-cells. Synergizes with IL12/interleukin-12 to induce IFNG synthesis from T-helper 1 (Th1) cells (PubMed:10653850). [UniProt]

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Research Area Cell Biology and Cellular Response kit; Immune System kit; Metabolism kit

PTM Activation of the IL1B precursor involves a CASP1-catalyzed proteolytic cleavage. Processing and secretion are temporarily associated.



ARG83337 Human IL1 beta ELISA Kit standard curve image

ARG83337 Human IL1 beta ELISA Kit results of a typical standard run with optical density reading at 450 nm.