



# Human Interleukin 1 $\beta$ , IL-1 $\beta$ ELISA Kit

<b>Product Code</b>	CSB-E08053h
<b>Abbreviation</b>	IL1B
<b>Protein Biological Process 1</b>	Immunity
<b>Uniprot No.</b>	P01584
<b>Product Type</b>	ELISA Kit
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Sample Types</b>	serum, plasma, tissue homogenates
<b>Detection Range</b>	7.8 pg/ml - 500 pg/ml
<b>Sensitivity</b>	1.95 pg/ml
<b>Assay Time</b>	1-5h
<b>Sample Volume</b>	50-100ul
<b>Detection Wavelength</b>	450 nm
<b>Lead Time</b>	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
<b>Research Area</b>	Immunology
<b>Gene Names</b>	IL1B
<b>Tag Info</b>	quantitative
<b>Protein Description</b>	Sandwich

## Description

The human IL1B ELISA Kit is intended to measure human IL1B in serum, plasma, or tissue homogenates. This assay uses the bi-antibody sandwich technique and enzyme-substrate chromogenic reaction to quantify human IL1B concentration. The intensity of the colored product is directly proportional to the concentration of IL1B present in the sample. This human IL1B ELISA kit has high specificity and excellent sensitivity and has been described in more than 83 publications.

IL1B is a potent pro-inflammatory cytokine that plays a prominent role in the host defense against infections, as well as in tissue homeostasis and repair. IL-1B binds to its receptor and activates a cascade of downstream signaling pathways, including the MAPK, cyclooxygenase, and NK-kB pathways, resulting in macrophage activation, intratumoral accumulation of immunosuppressive myeloid cells, and tumor growth, invasiveness, metastasis, and angiogenesis. Abnormal IL1B signaling drives tumorigenesis by promoting epithelial-to-mesenchymal transition, increasing the production of inflammatory cytokines and chemokines, inducing immune repression, and apoptosis resistance, as well as increasing leukocyte adhesions. Aberrant activation of



IL1B is related to poor prognosis in most cancer types, including colon, lung, and breast cancer. IL1B-causing inflammation occurs in several disease states, including diabetes, arthritis, and atherosclerosis.

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**Msd**

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