

Product datasheet

Human IL-1 beta ELISA Kit (Interleukin-1 beta) ab100562

[4 References](#) [3 Images](#)

Overview

Product name	Human IL-1 beta ELISA Kit (Interleukin-1 beta)
Detection method	Colorimetric
Sample type	Cell culture supernatant, Plasma
Assay type	Sandwich (quantitative)
Sensitivity	< 0.3 pg/ml
Range	0.48 pg/ml - 100 pg/ml
Recovery	99 %

Sample specific recovery

Sample type	Average %	Range
Cell culture supernatant	100.43	89% - 110%
Plasma	99.66	90% - 107%

Assay duration Multiple steps standard assay

Species reactivity **Reacts with:** Human

Product overview

Human IL-1 beta (Interleukin-1 beta) ELISA (Enzyme-Linked Immunosorbent Assay) kit is an *in vitro* enzyme-linked immunosorbent assay for the quantitative measurement of human IL-1 beta in plasma and cell culture supernatants. (Human IL-1 beta concentration is quite low in normal plasma, it may not be detected in this assay).

This assay employs an antibody specific for human IL-1 beta coated on a 96-well plate. Standards and samples are pipetted into the wells and IL-1 beta present in a sample is bound to the wells by the immobilized antibody. The wells are washed and biotinylated anti-Human IL-1 beta antibody is added. After washing away unbound biotinylated antibody, HRP-conjugated streptavidin is pipetted to the wells. The wells are again washed, a TMB substrate solution is added to the wells and color develops in proportion to the amount of IL-1 beta bound. The Stop Solution changes the color from blue to yellow, and the intensity of the color is measured at 450 nm.

We have not been able to detect the endogenous human IL-1 beta in normal serum with

ab100562, only in serum spiked with human IL-1 beta.

Notes

Optimization may be required with urine samples.

Tested applications

Suitable for: Sandwich ELISA

Platform

Microplate

Properties

Storage instructions

Store at -20°C. Please refer to protocols.

Components	1 x 96 tests
20X Wash Buffer Concentrate	1 x 25ml
300X HRP-Streptavidin Concentrate	1 x 200µl
5X Assay Diluent B	1 x 15ml
Assay Diluent A	1 x 30ml
Biotinylated anti-Human IL-1 beta	2 vials
IL-1 beta Microplate (12 x 8 wells)	1 unit
Recombinant Human IL-1 beta Standards	2 vials
Stop Solution	1 x 8ml
TMB One-Step Substrate Reagent	1 x 12ml

Function

Produced by activated macrophages, IL-1 stimulates thymocyte proliferation by inducing IL-2 release, B-cell maturation and proliferation, and fibroblast growth factor activity. IL-1 proteins are involved in the inflammatory response, being identified as endogenous pyrogens, and are reported to stimulate the release of prostaglandin and collagenase from synovial cells.

Sequence similarities

Belongs to the IL-1 family.

Domain

The similarity among the IL-1 precursors suggests that the amino ends of these proteins serve some as yet undefined function.

Cellular localization

Secreted. The lack of a specific hydrophobic segment in the precursor sequence suggests that IL-1 is released by damaged cells or is secreted by a mechanism differing from that used for other secretory proteins.

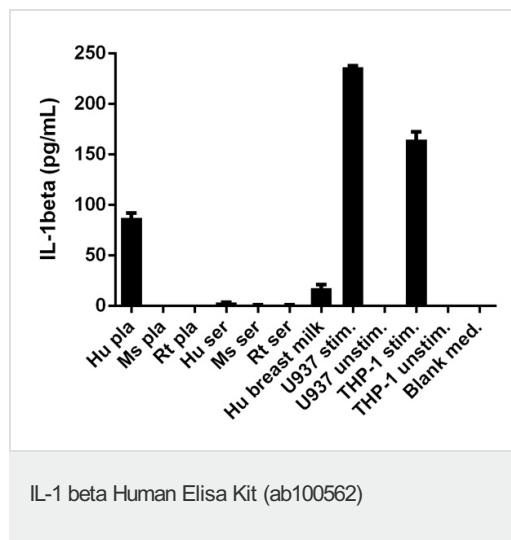
Applications

Our [Abpromise guarantee](#) covers the use of **ab100562** in the following tested applications.

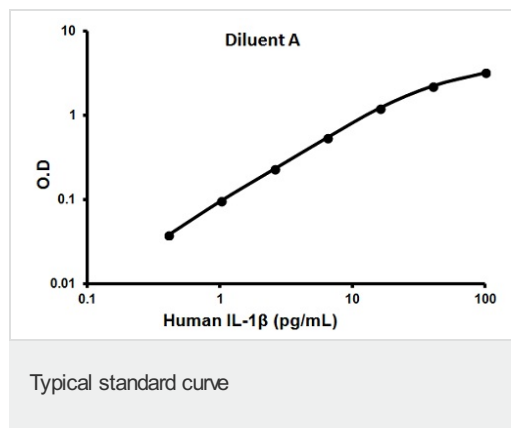
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Sandwich ELISA		Use at an assay dependent concentration.

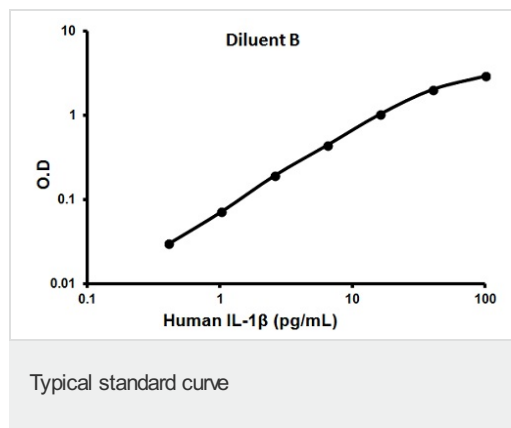
Images



Hu IL-1 beta measured in biological fluids showing quantity (pg) per mL of tested sample (U937: stimulated 24h with 10ng/mL PMA and 6h with LPS 1microgram/mL -- THP-1: stimulated 24h with 10ng/mL PMA)



Representative standard curve using ab100562



Representative standard curve using ab100562

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