



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

<b>Product Code</b>	CSB-E08054m
<b>Abbreviation</b>	IL1B
<b>Protein Biological Process 1</b>	Immunity
<b>Uniprot No.</b>	P10749
<b>Product Type</b>	ELISA Kit
<b>Immunogen Species</b>	Mus musculus (Mouse)
<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>Quality Control</b>	<p>A microplate reader capable of measuring absorbance at 450 nm, with the correction wavelength set at 540 nm or 570 nm.</p> <p>An incubator can provide stable incubation conditions up to 37°C<math>\pm</math>5°C.</p> <p>Centrifuge</p> <p>Vortex</p> <p>Squirt bottle, manifold dispenser, or automated microplate washer</p> <p>Absorbent paper for blotting the microtiter plate</p> <p>50-300ul multi-channel micropipette</p> <p>Pipette tips</p> <p>Single-channel micropipette with different ranges</p> <p>100ml and 500ml graduated cylinders</p> <p>Deionized or distilled water</p> <p>Timer</p> <p>Test tubes for dilution</p>
<b>Gene Names</b>	Il1b
<b>Tag Info</b>	quantitative
<b>Protein Description</b>	Sandwich
<b>Component</b>	<p>A micro ELISA plate --- The 96-well plate has been pre-coated with anti-mouse IL-1<math>\beta</math> This dismountable microplate can be divided into 12 x 8 strip plates.</p> <p>Two vials lyophilized standard --- Dilute a bottle of the standard at dilution series, read the OD values, and then draw a standard curve.</p> <p>Biotin-labeled IL-1<math>\beta</math> antibody (100 x concentrate) 1 x 120 <math>\mu</math>l ---Act as the detection antibody.</p> <p>HRP-avidin (100 x concentrate) 1 x 120 <math>\mu</math>l --- Bind to the detection antibody and react with the TMB substrate to make the solution chromogenic.</p> <p>Biotin-antibody Diluent 1 x 15 ml ---Dilute the high concentration Biotin-antibody</p>



to an appropriate working solution.

HRP-avidin Diluent 1 x 15 ml ---Dilute the high concentration HRP-avidin solution to an appropriate solution.

Sample Diluent 1 x 50 ml---Dilute the sample to an appropriate concentration.

Wash Buffer (25 x concentrate) 1 x 20 ml --- Wash away unbound or free substances.

TMB Substrate 1 x 10 ml --- Act as the chromogenic agent. TMB interacts with HRP, eliciting the solution turns blue.

Stop Solution 1 x 10 ml --- Stop the color reaction. The solution color immediately turns from blue to yellow.

Four Adhesive Strips (For 96 wells) --- Cover the microplate when incubation.

An instruction manual

## Description

This Mouse IL1B ELISA Kit was designed for the quantitative measurement of Mouse IL1B protein in serum, plasma, cell culture supernates, tissue homogenates. It is a Sandwich ELISA kit, its detection range is 31.25 pg/mL-2000 pg/mL and the sensitivity is 7.8 pg/mL.

## Product Precision

**Intra-assay Precision (Precision within an assay): CV%<8%**

Three samples of known concentration were tested twenty times on one plate to assess.

**Inter-assay Precision (Precision between assays): CV%<10%**

Three samples of known concentration were tested in twenty assays to assess.

## Linearity

To assess the linearity of the assay, samples were spiked with high concentrations of mouse IL-1 $\beta$  in various matrices and diluted with the Sample Diluent to produce samples with values within the dynamic range of the assay.

?	Sample	Serum(n=4)
1:1	Average %	88
	Range %	82-95
1:2	Average %	93
	Range %	88-98
1:4	Average %	96
	Range %	94-102
1:8	Average %	94
	Range %	90-100

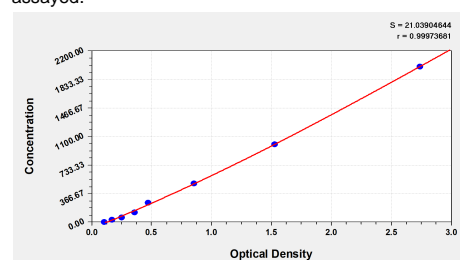
## Recovery

The recovery of mouse IL-1 $\beta$  spiked to levels throughout the range of the assay in various matrices was evaluated. Samples were diluted prior to assay as directed in the Sample Preparation section.

Sample Type	Average % Recovery	Range
Serum (n=5)	94	87-99
EDTA plasma (n=4)	93	88-98

## Typical

These standard curves are provided for demonstration only. A standard curve should be generated for each set of samples assayed.



pg/ml	OD1	OD2	Average	Corrected
2000	2.758	2.641	2.700	2.586



1000	1.438	1.587	1.513	1.399
500	0.833	0.869	0.851	0.737
250	0.474	0.477	0.476	0.362
125	0.350	0.375	0.363	0.249
62.5	0.267	0.253	0.260	0.146
31.25	0.165	0.186	0.176	0.062
0	0.119	0.108	0.114	?

**Msds**

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