



Guinea pig Interleukin-1 beta(IL1B) ELISA kit

Product Code	CSB-EL011614GU
Abbreviation	IL1B
Protein Biological Process 1	Immunity
Target Name	interleukin 1, beta
Uniprot No.	Q9WVG1
Alias	IL-1, IL1-BETA, IL1F2, catabolin preinterleukin 1 beta pro-interleukin-1-beta
Product Type	ELISA Kit
Immunogen Species	Cavia porcellus (Guinea pig)
Protein Biological Process 3	Inflammatory response
Sample Types	serum, plasma, tissue homogenates
Detection Range	15.6 pg/mL-1000 pg/mL
Sensitivity	3.9 pg/mL
Assay Time	1-5h
Sample Volume	50-100ul
Detection Wavelength	450 nm
Lead Time	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
Research Area	Immunology
Gene Names	IL1B
Tag Info	quantitative
Protein Description	Sandwich

Description

This Guinea pig IL1B ELISA Kit was designed for the quantitative measurement of Guinea pig IL1B protein in serum, plasma, tissue homogenates. It is a Sandwich ELISA kit, its detection range is 15.6 pg/mL-1000 pg/mL and the sensitivity is 3.9 pg/mL.

Target Details

This 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.

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 guinea pig IL1B 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)
	Average %	93
1:1	Range %	90-98
	Average %	97
1:2	Range %	85-100
	Average %	97
1:4	Range %	92-102
	Average %	93
1:8	Range %	85-98

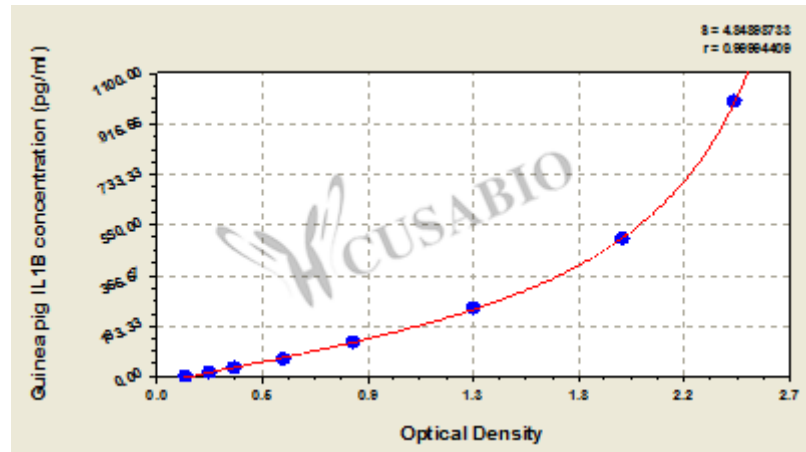
Recovery

The recovery of guinea pig IL1B 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)	90	87-94
EDTA plasma (n=4)	92	88-95

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
1000	2.400	2.457	2.429	2.295
500	1.955	1.963	1.959	1.825
250	1.324	1.351	1.338	1.204
125	0.838	0.829	0.834	0.700
62.5	0.529	0.556	0.543	0.409
31.2	0.334	0.341	0.338	0.204
15.6	0.232	0.238	0.235	0.101
0	0.134	0.133	0.134	?

Msds

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