

Datasheet for KOA0211**Mouse IL-1 beta ELISA Kit****Overview**

Description:	Mouse IL-1 beta AccuSignal ELISA Kit - KOA0211
Item No.:	KOA0211
Size:	1 Kit
Applications:	ELISA
Reactivity:	Mouse
Range:	12.5 pg/ml - 800 pg/ml

Product Details

Background:	Interleukin-1beta(IL-1beta) is a potent stimulator of bone resorption whose gene is mapped to 2q14, and has been implicated in the pathogenesis of high bone turnover and osteoporosis. IL-1beta, a prominent microglia-derived cytokine, caused oligodendrocyte death in coculture with astrocytes and microglia, but not in pure culture of oligodendrocytes alone ¹ . It also can cause nuclear export of a specific NCOR corepressor complex, resulting in derepression of a specific subset of nuclear factor-kappa-B(NFkB)-regulated genes ² . Furthermore, Microenvironmental IL-1beta and, to a lesser extent, IL-1alpha are required for in vivo angiogenesis and invasiveness of different tumor cells ³ . Additionally, the cooperation of IL-1beta and PDGFB induces contractile-to-synthetic phenotype modulation of human aortic smooth muscle cells in culture ⁴ . Moreover, the association with disease may be explained by the biologic properties of IL-1beta, which is an important proinflammatory cytokine and a powerful inhibitor of gastric acid secretion.
Synonyms:	Catabolin, Hematopoietin 1, IFN beta inducing factor, IL 1, IL 1 beta, IL 1B, IL-1 beta, IL1, IL1 BETA, IL1B, IL1B_HUMAN, IL1F2, Interleukin 1 beta, Interleukin 1 beta precursor, Interleukin-1 beta, LAF, OAF, Osteoclast activating factor, Preinterleukin beta, Pro interleukin 1 beta
Detection Kit Type:	ELISA Kit
Detection Range:	12.5 pg/ml - 800 pg/ml
Sensitivity:	<1 pg/ml

Target Details

Gene Name:	IL1B
Reactivity:	Mouse

Immunogen:	Expression system for standard: E.coli; Immunogen sequence: V118-S269
Purity/Specificity:	Natural and recombinant mouse IL-1 beta. There is no detectable cross-reactivity with other relevant proteins.
Relevant Links:	• UniProtKB - P10749 • NCBI - NP_032387.1 • GeneID - 16176 • KOA0211 Protocol

Application Details

Tested Applications:	ELISA
Application Note:	Useful in Sandwich ELISA for Quantitative Detection of Antigen. Aliquot 0.1ml per well of the 800pg/ml, 400pg/ml, 200pg/ml, 100pg/ml, 50pg/ml, 25pg/ml, 12.5pg/ml mouse IL-1 beta standard solutions into the precoated 96-well plate. Add 0.1ml of the sample diluent buffer into the control well (Zero well). Add 0.1ml of each properly diluted sample of mouse cell culture supernatants, serum or plasma(heparin, EDTA) to each empty well. We recommend that each mouse IL-1 beta standard solution and each sample is measured in duplicate.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	12.5 pg/ml-800 pg/ml
Other:	DOE: 2-8° C - 06/13/2023 -20° C -12/12/2023

Formulation

Concentration:	1 Kit
Anticoagulant:	Heparin Sodium

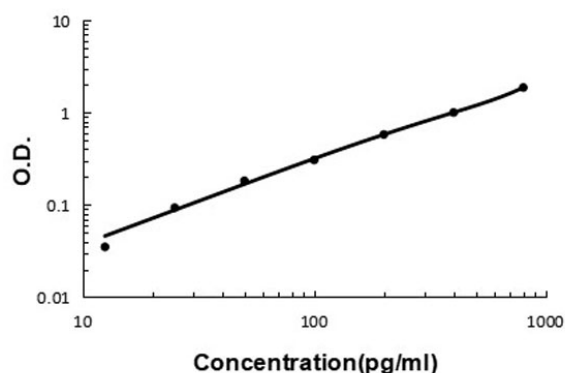
Shipping & Handling

Shipping Condition:	Wet Ice
Storage Condition:	Store vials at 4°C prior to opening. Centrifuge product if not completely clear after standing at room temperature. This product is stable for 6 months at 4°C as an undiluted liquid. Dilute only prior to immediate use. For extended storage freeze at -20°C or below for 12 months. Avoid cycles of freezing and thawing.

Expiration: See kit insert for complete instructions.

Images

Mouse IL-1 Beta ELISA Kit



ELISA

Mouse IL-1 beta ELISA Kit standard curve.

References

- Zhang Q et al. Humanized anti-TLR4 monoclonal antibody ameliorates lipopolysaccharide-related acute kidney injury by inhibiting TLR4/NF- κ B signaling. *Mol Med Rep.* (2021)

Disclaimer

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