

Datasheet for KOA0209**Human IL-1 beta ELISA Kit****Overview**

Description:	Human IL-1 beta AccuSignal ELISA Kit - KOA0209
Item No.:	KOA0209
Size:	1 Kit
Applications:	ELISA
Reactivity:	Human
Range:	3.9 pg/ml - 250 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. 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. Furthermore, Microenvironmental IL-1beta and, to a lesser extent, IL-1alpha are required for in vivo angiogenesis and invasiveness of different tumor cells. Additionally, the cooperation of IL-1beta and PDGFB induces contractile-to-synthetic phenotype modulation of human aortic smooth muscle cells in culture. 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:	3.9 pg/ml - 250 pg/ml
Sensitivity:	<0.15 pg/ml

Target Details

Gene Name:	IL1B
Reactivity:	Human

Immunogen:	Expression system for standard: E.coli; Immunogen sequence: A117-S269
Purity/Specificity:	Natural and recombinant human IL-1 beta. There is no detectable cross-reactivity with other relevant proteins.
Relevant Links:	• UniProtKB - P01584 • NCBI - NP_000567.1 • GenelD - 3553 • KOA0209 Protocol

Application Details

Tested Applications:	ELISA
Application Note:	Useful in Sandwich ELISA for Quantitative Detection of Antigen. Aliquot 0.1ml per well of the 250pg/ml, 125pg/ml, 62.5pg/ml, 31.2pg/ml, 16.5pg/ml, 7.8pg/ml, 3.9pg/ml human 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 human cell culture supernatants, serum or plasma(heparin, EDTA, citrate) to each empty well. We recommend that each human 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.

Formulation

Anticoagulant:	Heparin Sodium
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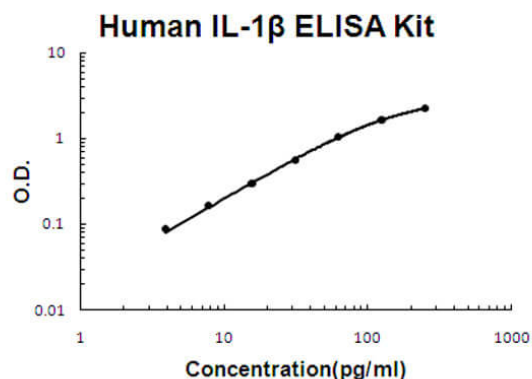
Shipping & Handling

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

ELISA

Human IL-1 beta AccuSignal ELISA Kit standard curve. Assay Range: 3.9pg/ml-250pg/ml. Sensitivity: <0.15pg/ml.

**Disclaimer**

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.