

Datasheet for KOA0207**Rat IL-1 alpha ELISA Kit****Overview**

Description:	Rat IL-1 alpha AccuSignal ELISA Kit - KOA0207
Item No.:	KOA0207
Size:	1 Kit
Applications:	ELISA
Reactivity:	Rat
Range:	4.69 pg/ml - 300 pg/ml

Product Details

Background:	Interleukin-1 alpha(IL-1 alpha) and interleukin-1 beta(IL-1 beta) are two biochemically distinct, but distantly related, polypeptidic cytokines that play a key role in inflammation, immunologic reactions, and tissue repair. IL-1 alpha has been implicated in the pathogenesis of infectious, autoimmune and inflammatory diseases. Recently, it has been shown that IL-1 alpha is identical to hematopoietin 1, which is described as a hematopoietic growth factor acting on early progenitor cells in synergy with other hematopoietic growth factors. ¹ The human interleukin 1 alpha gene is assigned to chromosome 2. Genetic polymorphisms at interleukin(IL-1)alpha and IL-1beta have been recently suggested to be associated with severity of adult periodontitis. The murine IL-1 alpha and IL-1 beta genes encode structurally and evolutionarily related cytokines that exert a regulatory role in numerous physiological processes including hemopoiesis. The standard product used in this kit is recombinant rat IL-1alpha with the molecular mass of 18kDa.
Synonyms:	Hematopoietin 1, IFL, IFN, IFN alpha, IFN-alpha-1/13, IFNA@, IFNA1, IFNA1_HUMAN, IFNA13, IFNAP22, IL 1 alpha, IL 1a, IL1, IL1 ALPHA, IL1F1, Ilia, Interferon Alpha, Interferon alpha 1, Interferon alpha 1/13, Interferon alpha 1/13 precursor, Interferon alpha 13, Interferon alpha D, Interferon alpha leukocyte, Interferon alpha-1/13, Interferon alpha-D, Interferon leukocyte, Interleukin 1 alphas, Interleukin1 alpha, LeIF D, Preinterleukin 1, Pro interleukin 1, Pro interleukin 1 alpha, Prointerleukin 1
Detection Kit Type:	ELISA Kit
Detection Range:	4.69 pg/ml - 300 pg/ml
Sensitivity:	<0.5 pg/ml

Target Details

Gene Name:	IL1A
Reactivity:	Rat
Immunogen:	Expression system for standard: E.coli; Immunogen sequence: S115-S270
Purity/Specificity:	Natural and recombinant rat IL-1 alpha. There is no detectable cross-reactivity with other relevant proteins.
Relevant Links:	• UniProtKB - P16598 • NCBI - NP_058715.1 • GeneID - 24493 • KOA0207 Protocol

Application Details

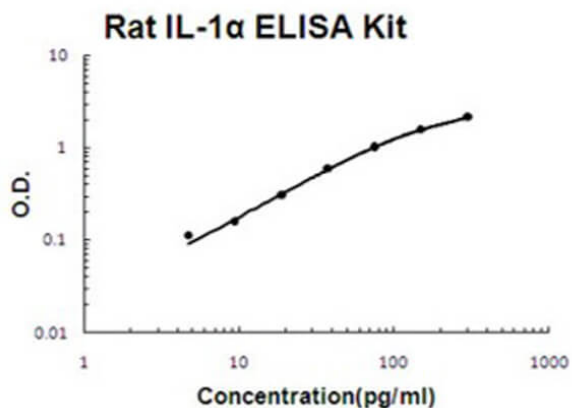
Tested Applications:	ELISA
Application Note:	Useful in Sandwich ELISA for Quantitative Detection of Antigen. Aliquot 0.1ml per well of the 300pg/ml, 150pg/ml, 75pg/ml, 37.5pg/ml, 18.8pg/ml, 9.4pg/ml, 4.69pg/ml rat IL-1 alpha standard solutions into the precoated 96-well plate. Add 0.1ml of the sample diluent buffer into the control well (Zero well). Add 0.1ml of each properly diluted sample of rat cell culture supernates or serum to each empty well. We recommend that each rat IL-1 alpha 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

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

Rat IL-1 alpha AccuSignal ELISA Kit standard curve. Assay Range: 4.69pg/ml-300pg/ml. Sensitivity: <0.5pg/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.