

ARG80235 Rat IL1 beta ELISA Kit

Package: 96 wells
Store at: 4°C

Component

Cat. No.	Component Name	Package	Temp
ARG80235-001	Antibody-coated microplate	8 X 12 strips	4°C. Unused strips should be sealed tightly in the air-tight pouch.
ARG80235-002	Standard (Lyophilized)	3 X 3.2 ng/vial	4°C
ARG80235-003	Standard diluent buffer	20 ml	4°C
ARG80235-004	Antibody conjugate concentrate	400 µl	4°C
ARG80235-005	Antibody diluent buffer	16 ml	4°C
ARG80235-006	HRP-Streptavidin concentrate	400 µl	4°C (Protect from light)
ARG80235-007	HRP-Streptavidin diluent buffer	16 ml	4°C
ARG80235-008	20X Wash buffer	50 ml	4°C
ARG80235-009	TMB substrate	12ml	4°C (Protect from light)
ARG80235-010	STOP solution	12ml	4°C
ARG80235-011	Plate sealer	4 strips	Room temperature

Summary

Product Description	ARG80235 Rat IL1 beta ELISA Kit is an Enzyme Immunoassay kit for the quantification of Rat IL1 beta in Serum, Plasma, Cell culture supernatants.
Tested Reactivity	Rat
Tested Application	ELISA
Specificity	No significant cross-reactivity or interference with Human IL-2,4,1 alpha,sIL-2R,sIL-4R mouse IL-2,4,10,1 alpha rat GM-CSF, IL-2,4,10,1 alpha, SCF, TNF- alpha
Target Name	IL1 beta
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm
Sensitivity	30 pg/ml
Sample Type	Serum, Plasma, Cell culture supernatants
Standard Range	62.5 - 4000 pg/ml

Sample Volume	100 µl
Precision	CV: less than 10%
Alternate Names	Interleukin-1 beta; IL1-BETA; IL-1; IL-1 beta; Catabolin; IL1F2

Application Instructions

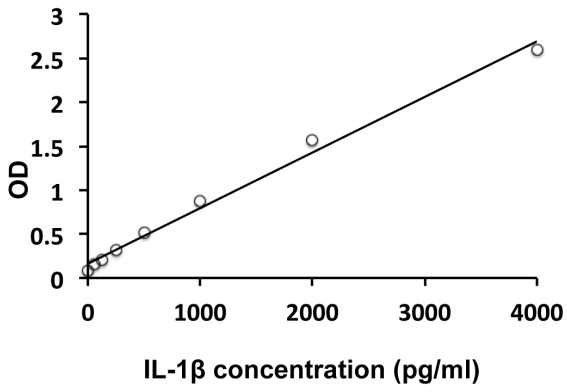
Assay Time	4 hours
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Properties

Form	96 well
Storage instruction	Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	IL1B
Gene Full Name	interleukin 1 beta
Background	IL1 beta 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. [provided by RefSeq, Jul 2008]
Function	IL1 beta is a potent proinflammatory cytokine. Initially discovered as the major endogenous pyrogen, induces prostaglandin synthesis, neutrophil influx and activation, T-cell activation and cytokine production, B-cell activation and antibody production, and fibroblast proliferation and collagen production. Promotes Th17 differentiation of T-cells. Synergizes with IL12/interleukin-12 to induce IFNG synthesis from T-helper 1 (Th1) cells (PubMed:10653850). [UniProt]
Highlight	<p>Related products: IL1 beta antibodies; IL1 beta ELISA Kits; IL1 beta Duos / Panels; IL1 beta recombinant proteins;</p> <p>Related news: HMGB1 in inflammation Inflammatory Cytokines Activation of IL-1 beta and IL-18 by Canonical Inflammasome Pathway Exploring Antiviral Immune Response RIP1 activation and pathogenesis of NASH</p> <p>New ELISA data calculation tool: Simplify the ELISA analysis by GainData</p>
Research Area	Cell Biology and Cellular Response kit; Immune System kit; Metabolism kit
PTM	Activation of the IL1B precursor involves a CASP1-catalyzed proteolytic cleavage. Processing and secretion are temporarily associated.



ARG80235 Rat IL1 beta ELISA Kit standard curve image

ARG80235 Rat IL1 beta ELISA Kit results of a typical standard run with optical density reading at 450 nm.