

ARG83522 arigoQIK™ Rat IL1 beta ELISA Kit

Package: 96 wells
Store at: 4°C, -20°C, -80°C

Component

Cat. No.	Component Name	Package	Temp
ARG83522-01	Antibody Coated Microplate	8 X 12 strips	4°C
ARG83522-02	Standard	2 vials	4°C
ARG83522-03	100X Antibody Conjugate Concentrate	60 ul	≤ -20°C
ARG83522-04	1000X HRP-Streptavidin solution	15 ul	4°C
ARG83522-05	Standard/Sample Diluent Buffer	20 ml	4°C
ARG83522-06	Antibody Diluent Buffer	35 ml	4°C
ARG83522-07	10X Wash Buffer	35 ml	4°C
ARG83522-08	TMB substrate	12 ml	4°C (protect from light)
ARG83522-09	STOP solution	12 ml	4°C
ARG83522-10	Plate sealer	2 strips	

Summary

Product Description	ARG83522 arigoQIK™ Rat IL1 betaELISA Kit is an Enzyme Immunoassay kit for the quantification of Rat IL1 beta in serum, plasma and cell culture supernatants.
Tested Reactivity	Rat
Tested Application	ELISA
Target Name	IL1 beta
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	7.8 pg/ml
Sample Type	Serum, plasma and cell culture supernatants.
Standard Range	15.63 - 1000 pg/ml
Sample Volume	50 µL
Precision	Intra-Assay CV: less than 10% Inter-Assay CV: less than 10%
Alternate Names	IL1B; Interleukin 1 Beta; IL1F2 2; IL1-BETA; Interleukin-1 Beta; IL-1 Beta; Catabolin; IL-1B; Pro-Interleukin-1-Beta; Preinterleukin 1 Beta; Interleukin 1beta; IL1beta; IL-1

Application Instructions

Assay Time 2 hours

Properties

Form 96 well

Storage instruction Store the kit at 4°C, -20°C, -80°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 The protein encoded by this gene 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. Similarly, IL-1B has been implicated in human osteoarthritis pathogenesis. Patients with severe Coronavirus Disease 2019 (COVID-19) present elevated levels of pro-inflammatory cytokines such as IL-1B in bronchial alveolar lavage fluid samples. The lung damage induced by the Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is to a large extent, a result of the inflammatory response promoted by cytokines such as IL-1B. This gene and eight other interleukin 1 family genes form a cytokine gene cluster on chromosome 2. [provided by RefSeq, Jul 2020]

Function Acts as a sensor of *S.pyogenes* infection in skin: cleaved and activated by pyogenes SpeB protease, leading to an inflammatory response that prevents bacterial growth during invasive skin infection. [Uniprot]

Cellular Localization Cytoplasm, Lysosome, Secreted. [Uniprot]