

ARG88010

arigoQIK™ Rat IL1 beta ELISA Development Kit

Package: 1 kit(5 plates), 1 kit
(15 plates)
Store at: 4°C, -20°C

Summary

Product Description

ARG88010 arigoQIK™ Rat IL1 beta ELISA Development Kit, includes Capture antibody, Detection antibody, Standard, and HRP-Streptavidin Solution. This ELISA Development Kit is designed for the development of sandwich ELISA to measure Rat IL1 beta in serum, plasma and cell culture supernatants.

For other reagents required for [arigoQIK™ ELISA Development Kit](#), please refer [ARG83524 Integral Reagent Kit \(ELISA Development Kit\)](#)

[More about arigoQIK™:](#)

- Optimized capture and detection antibody pairs
- Reduced incubation time and wash cycles
- 2-hour quicker than conventional ELISA process
- 5- and 15-plate packages available

Tested Reactivity

Rat

Tested Application

ELISA

Target Name

IL1 beta

Conjugation

HRP

Conjugation Note

Substrate: TMB and read at 450 nm.

Sensitivity

7.81 pg/ml

Sample Type

Serum, plasma and cell culture supernatants.

Standard Range

15.63 - 1000pg/ml

Sample Volume

50 µl

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

Properties

Storage instruction

Store components at 4°C or -20°C. 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]

Highlight

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Cellular Localization

Cytoplasm, Lysosome, Secreted. [Uniprot]