

ARG83549

arigoQIK™ Rat IL4 ELISA Development Kit

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

Summary

Product Description

ARG83549 arigoQIK™ Rat IL4 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 IL4 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

IL4

Conjugation

HRP

Conjugation Note

Substrate: TMB and read at 450 nm.

Sensitivity

3.91 pg/ml

Sample Type

Serum, plasma and cell culture supernatants.

Standard Range

7.81 - 500pg/ml

Sample Volume

50 µl

Alternate Names

IL4; Interleukin 4; IL-4; Lymphocyte Stimulatory Factor 1; BCGF-1; BCGF1; BSF1; B_cell Stimulatory Factor 1; B Cell Growth Factor 1; Interleukin-4; Binetrakin; Pitrakinra; MGC79402; BSF-1; B-Cell Stimulatory Factor 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

IL4

Gene Full Name

Interleukin 4

Background

The protein encoded by this gene is a pleiotropic cytokine produced by activated T cells. This cytokine is a ligand for interleukin 4 receptor. The interleukin 4 receptor also binds to IL13, which may contribute to many overlapping functions of this cytokine and IL13. STAT6, a signal transducer and activator of transcription, has been shown to play a central role in mediating the immune regulatory signal of this cytokine. This gene, IL3, IL5, IL13, and CSF2 form a cytokine gene cluster on chromosome 5q, with this

gene particularly close to IL13. This gene, IL13 and IL5 are found to be regulated coordinately by several long-range regulatory elements in an over 120 kilobase range on the chromosome. IL4 is considered an important cytokine for tissue repair, counterbalancing the effects of proinflammatory type 1 cytokines, however, it also promotes allergic airway inflammation. Moreover, IL-4, a type 2 cytokine, mediates and regulates a variety of human host responses such as allergic, anti-parasitic, wound healing, and acute inflammation. This cytokine has been reported to promote resolution of neutrophil-mediated acute lung injury. In an allergic response, IL-4 has an essential role in the production of allergen-specific immunoglobulin (Ig) E. This pro-inflammatory cytokine has been observed to be increased in COVID-19 (Coronavirus disease 2019) patients, but is not necessarily associated with severe COVID-19 pathology. Two alternatively spliced transcript variants of this gene encoding distinct isoforms have been reported. [provided by RefSeq, Aug 2020]

Function	Engagement of both types of receptors initiates JAK3 and to a lower extent JAK1 phosphorylation leading to activation of the signal transducer and activator of transcription 6/STAT6. [UniProt]
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PTM	Disulfide bond, Glycoprotein. [UniProt]
Cellular Localization	Secreted. [UniProt]