

## 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; Pitrakina; 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]
Highlight	Related news: <a href="#">arigoQIK, DIY your sandwich ELISA kits;</a>
PTM	Disulfide bond, Glycoprotein. [UniProt]
Cellular Localization	Secreted. [UniProt]