

# Product datasheet

info@arigobio.com

# ARG83025 Porcine IL4 ELISA Kit

Package: 96 wells Store at: 4°C

## Summary

Product Description ARG83025 Porcine IL4 ELISA Kit is an Enzyme Immunoassay kit for the quantification of Porcine IL4 in

serum, plasma (heparin), ascites, urine and cell culture supernatants.

Tested Reactivity Pig
Tested Application ELISA

Specificity Cross-reacts with:

Human IL4. Felinee IL4.

Not cross-reacts with:

Mouse IL4. Rat IL4. Canine IL4.

Target Name IL4
Conjugation HRP

Conjugation Note Substrate: TMB and read at 450 nm.

Sensitivity 0.312 ng/ml

Sample Type Serum, plasma (heparin), ascites, urine and cell culture supernatants.

Standard Range 0.625 - 40 ng/ml

Sample Volume  $$100~\mu l$$ 

Precision Intra-Assay CV: less than 10%

Inter-Assay CV: less than 10%

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

# **Application Instructions**

Assay Time ~ 4 hours

### **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 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 immunoglobin (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 extend JAK1 phosphorylation leading to activation of the signal transducer and activator of transcription 6/STAT6. [UniProt]

Highlight

Related products:

<u>IL4 antibodies</u>; <u>IL4 ELISA Kits</u>; <u>IL4 recombinant proteins</u>;

New ELISA data calculation tool: Simplify the ELISA analysis by GainData

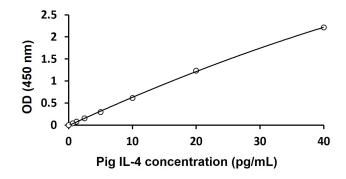
PTM

Disulfide bond, Glycoprotein. [UniProt]

Cellular Localization

Secreted. [UniProt]

### **Images**



### ARG83025 Porcine IL4 ELISA Kit standard curve image

ARG83025 Porcine IL4 ELISA Kit results of standard run with optical density reading at 450 nm