

## Product datasheet

# Rat IL-4 ELISA Set (without plates) ab48423

[1 Image](#)

### Overview

<b>Product name</b>	Rat IL-4 ELISA Set (without plates)
<b>Sample type</b>	Cell culture supernatant, Serum, Plasma
<b>Assay type</b>	Sandwich (quantitative)
<b>Sensitivity</b>	< 15 pg/ml
<b>Range</b>	31.25 pg/ml - 1000 pg/ml
<b>Assay duration</b>	Multiple steps standard assay
<b>Species reactivity</b>	<b>Reacts with:</b> Rat
<b>Product overview</b>	Abcam's IL-4 Rat <i>in vitro</i> ELISA Set is designed for the quantitative measurement of Rat IL-4 in cell culture supernatants, buffered solutions, serum, plasma and other body fluids.

The rat IL-4 ELISA Set includes both the capture and the detection antibodies as well as Horse-Radish peroxidase conjugated Streptavidin (HRP-Strep) and TMB which are the reagents used in the colour development step.

This ELISA Set is intended to measure rat IL-4 in cell -culture supernatants, as well as in serum samples. The enclosed procedures provide general guidelines for ELISA preparation. This procedure may need some optimization depending on the plastic, matrix, standard range.

Recognizes both natural and recombinant Rat IL-4 **Range:** 31.25 pg/ml - 1000 pg/ml **Sensitivity** < 15 pg/ml

<b>Tested applications</b>	<b>Suitable for:</b> Sandwich ELISA
<b>Platform</b>	Reagents

### Properties

**Storage instructions** Store at +4°C. Please refer to protocols.

Components	Identifier	15 x 96 tests	10 x 96 tests	5 x 96 tests
Chromogen TMB Substrate Solution		6 vials	4 vials	2 vials

Components	Identifier	15 x 96 tests	10 x 96 tests	5 x 96 tests
Detection biotinylated anti-Rat IL-4 antibody		3 x 0.55ml	2 x 0.55ml	1 x 0.55ml
Rat IL-4 Capture antibody		3 x 0.5ml	2 x 0.5ml	1 x 0.5ml
Rat IL-4 Standard (Lyophilized)	Yellow	15 vials	10 vials	5 vials
Streptavidin-HRP		3 vials	2 vials	1 vial

### Relevance

IL-4 is a pleiotropic cytokine produced by activated T cells, mast cells and basophils. It 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. IL-4 elicits many different biological responses, but has two dominant functions. The first is regulating differentiation of naïve CD4+ T cell to the Th2 type. Th2 cells produce IL-4, IL5, IL10 and IL13, which tend to favor a humoral immune response while suppressing a cell mediated immune response controlled by Th1 cells. 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. The second is regulating IgE and IgG1 production by B cells. Two alternatively spliced transcript variants of this gene encoding distinct isoforms have been reported.

### Cellular localization

Secreted

### Applications

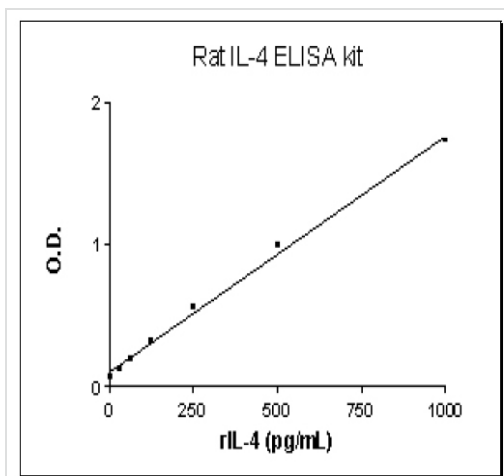
#### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab48423 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
<b>Sandwich ELISA</b>		Use at an assay dependent concentration.

### Images



Rat IL-4 Standard curve ranging from 31.25 to 1000 pg/mL

Rat IL-4 ELISA Set (ab48423)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

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