abcam

Product datasheet

Rat IL-4 ELISA Kit ab46073

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Overview

Product name Rat IL-4 ELISA Kit

Detection method Colorimetric

Precision Intra-assay

Sample	n	Mean	SD	CV%
A	18	379.3pg/ml	13.5	2.5%
В	19	532.5pg/ml	5.99	1.6%

Inter-assay

Sample	n	Mean	SD	CV%	
A	6	128.6pg/ml	7.6	5.9%	
В	6	532.2pg/ml	20.6	3.8%	

Sample type Cell culture supernatant, Serum

Assay type Sandwich (quantitative)

Sensitivity < 15 pg/ml

Range 31.25 pg/ml - 1000 pg/ml

Assay time 4h 45m

Assay duration Multiple steps standard assay

Species reactivity Reacts with: Rat

Product overview Abcam's IL-4 Rat in vitro ELISA (Enzyme-Linked Immunosorbent Assay) kit is designed for the

quantitative measurement of IL-4 in cell culture supernatants, buffered solutions and plasma.

A monoclonal antibody specific for IL-4 has been coated onto the wells of the microtiter strips provided. Samples, including standards of known IL-4 concentRations, control specimens or unknowns are pipetted into these wells. During the first incubation, the standards or samples and a biotinylated monoclonal antibody specific for IL-4 are simultaneously incubated. After washing, the enzyme Streptavidin-HRP, that binds the biotinylated antibody is added, incubated and washed. A TMB substRate solution is added which acts on the bound enzyme to induce a colored

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reaction product. The intensity of this colored product is directly proportional to the concentRation of IL-4 present in the samples.

This kit will recognize both endogenous and recombinant rat IL-4.

Platform

Microplate

Properties

Storage instructions

Store at +4°C. Please refer to protocols.

Components	Identifier	1 x 96 tests	2 x 96 tests
10X Standard Diluent Buffer	Black	1 x 15ml	1 x 25ml
200X Wash Buffer	White	1 x 10ml	2 x 10ml
Biotinylated Antibody Diluent	Red	1 x 7.5ml	1 x 13ml
Biotinylated anti-IL-4	Red	1 x 400µl	2 x 400µl
Chromogen TMB Substrate Solution		1 x 11ml	1 x 24ml
HRP Diluent	Red	1 x 12ml	1 x 23ml
IL-4 Microplate (12 x 8 well strips)		1 unit	2 units
Rat IL-4 Standard (Lyophilized)	Yellow	2 vials	4 vials
Stop Reagent	Black	1 x 11ml	2 x 11ml
Streptavidin-HRP		2 x 5µl	4 x 5µl

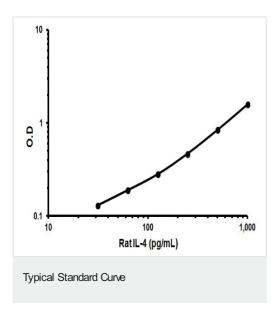
Relevance

IL-4 is a pleiotropic cytokine produced by activated T cells. 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. STAT6, a signal transducer and activator of transcription, has been shown to play a central role in mediating the immune regulatory signal of IL-4. IL-4, IL3, IL5, IL13, and CSF2 form a cytokine gene cluster on chromosome 5q, with this gene particularly close to IL13. IL-4, IL13 and IL5 are found to be regulated coordinately by several long-range regulatory elements in an over 120 kilobase range on the chromosome. Two alternatively spliced transcript variants of IL-4 encoding distinct isoforms have been reported.

Cellular localization

Secreted

Images



Representative Standard Curve using ab46073

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