

Rat IL-4 ELISA Kit ab100770

9 References 2 Images

Overview

Product name	Rat IL-4 ELISA Kit
Detection method	Colorimetric
Sample type	Cell culture supernatant, Serum, Plasma
Assay type	Sandwich (quantitative)
Sensitivity	< 1.5 pg/ml
Range	0.66 pg/ml - 160 pg/ml
Recovery	96 %

Sample specific recovery

Sample type	Average %	Range
Cell culture supernatant	97.69	85% - 104%
Serum	96.79	84% - 103%
Plasma	94.86	82% - 102%

Assay duration Multiple steps standard assay

Species reactivity **Reacts with:** Rat

Product overview

Abcam's IL-4 Rat ELISA (Enzyme-Linked Immunosorbent Assay) kit is an *in vitro* enzyme-linked immunosorbent assay for the quantitative measurement of rat IL-4 in serum, plasma, and cell culture supernatants.

This assay employs an antibody specific for rat IL-4 coated on a 96-well plate. Standards and samples are pipetted into the wells and IL-4 present in a sample is bound to the wells by the immobilized antibody. The wells are washed and biotinylated anti-rat IL-4 antibody is added. After washing away unbound biotinylated antibody, HRP-conjugated streptavidin is pipetted to the wells. The wells are again washed, a TMB substrate solution is added to the wells and color develops in proportion to the amount of IL-4 bound. The Stop Solution changes the color from blue to yellow, and the intensity of the color is measured at 450 nm.

Platform Microplate

Properties

Storage instructions

Store at -20°C. Please refer to protocols.

Components	1 x 96 tests
20X Wash Buffer	1 x 25ml
5X Assay Diluent B	1 x 15ml
600X HRP-Streptavidin Concentrate	1 x 200µl
Assay Diluent A	1 x 30ml
Biotinylated anti-Rat IL-4	2 vials
IL-4 Microplate (12 x 8 wells)	1 unit
Recombinant rat IL-4 Standard (lyophilized)	2 vials
Stop Solution	1 x 8ml
TMB One-Step Substrate Reagent	1 x 12ml

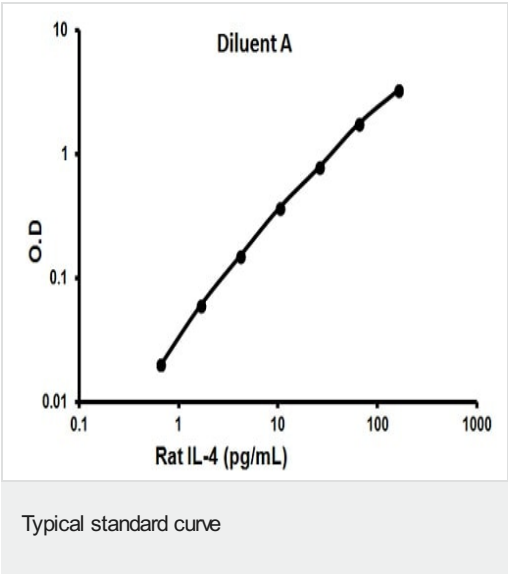
Relevance

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.

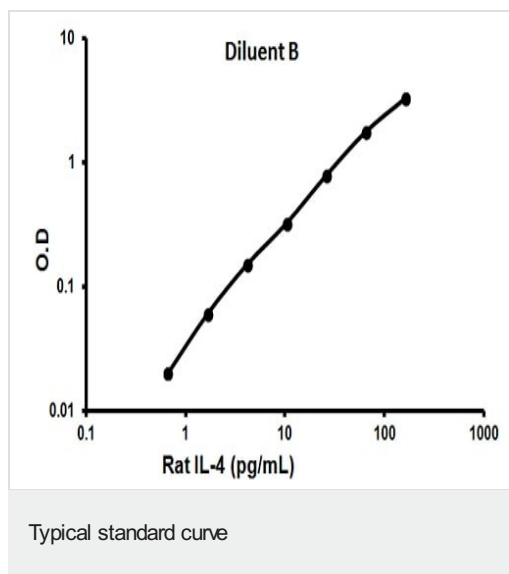
Cellular localization

Secreted

Images



Representative standard curve using ab100770



Representative standard curve using ab100770

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