

Product datasheet

Mouse IL-21 ELISA Kit ab100707

2 Images

Overview

Product name	Mouse IL-21 ELISA Kit
Detection method	Colorimetric
Sample type	Cell culture supernatant, Plasma
Assay type	Sandwich (quantitative)
Sensitivity	< 6 pg/ml
Range	8.19 pg/ml - 2000 pg/ml
Recovery	89 %

Sample specific recovery

Sample type	Average %	Range
Cell culture supernatant	98.65	87% - 109%
Plasma	77.38	68% - 87%

Assay duration Multiple steps standard assay

Species reactivity **Reacts with:** Mouse

Product overview

Abcam's IL-21 Mouse ELISA (Enzyme-Linked Immunosorbent Assay) kit is an *in vitro* enzyme-linked immunosorbent assay for the quantitative measurement of mouse IL-21 in plasma and cell culture supernatants. (Mouse IL-21 concentration is pretty low in normal plasma, it may not be detected in this assay).

This assay employs an antibody specific for mouse IL-21 coated on a 96-well plate. Standards and samples are pipetted into the wells and IL-21 present in a sample is bound to the wells by the immobilized antibody. The wells are washed and biotinylated anti-mouse IL-21 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-21 bound. The Stop Solution changes the color from blue to yellow, and the intensity of the color is measured at 450 nm.

We have not been able to detect endogenous Mouse IL-21 in normal serum with ab100707, only in serum spiked with Mouse IL-21.

Platform Microplate

Properties

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

Components	1 x 96 tests
200X HRP-Streptavidin Concentrate	1 x 200µl
20X Wash Buffer Concentrate	1 x 25ml
5X Assay Diluent B	1 x 15ml
Assay Diluent A	1 x 30ml
Biotinylated anti-mouse IL-21	2 vials
IL-21 Microplate (12 x 8 wells)	1 unit
Recombinant mouse IL-21 Standard (lyophilized)	2 vials
Stop Solution	1 x 8ml
TMB One-Step Substrate Reagent	1 x 12ml

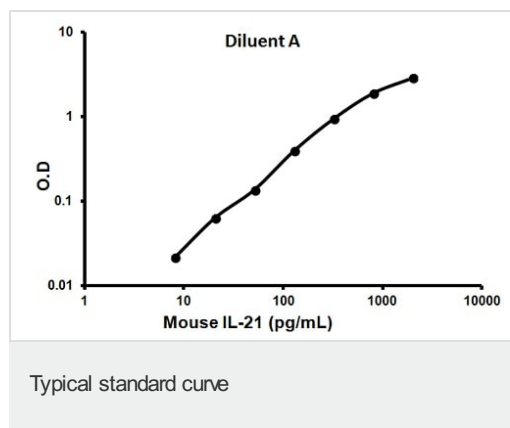
Relevance

A novel cytokine related to IL-2 and IL-15 was recently identified and designated IL-21. IL-21 has been found to be a powerful growth factor for naive B cells. The receptor for IL-21 (IL-21R, also termed NILR for novel Interleukin receptor) is a new member of the class I cytokine receptor family. IL-21R forms a complex with the common cytokine receptor γ chain, γc , and mediates IL-21 signaling. Both IL-21R and the γc are necessary for the IL-21 function. IL-21 and its receptor activate JAK/STAT signaling pathway. IL-21R is expressed in spleen, thymus, natural killer (NK), T and B cell lines. IL-21 plays a role in the proliferation and maturation of NK, B and T cell populations.

Cellular localization

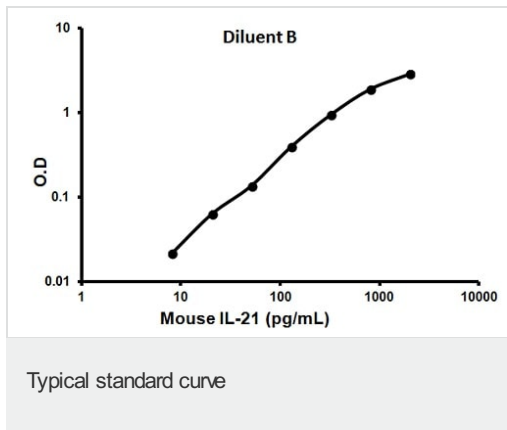
Secreted

Images



Representative standard curve using ab100707

Typical standard curve



Representative standard curve using ab100707

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