# abcam

# Product datasheet

# Mouse IL-21 ELISA Kit ab171180

## 1 Image

#### Overview

Product name Mouse IL-21 ELISA Kit

**Detection method**Colorimetric

Precision

Sample	n	Mean	SD	CV%
Overall				< 10%

Inter-assay

Intra-assay

Sample	n	Mean	SD	CV%	
Overall				< 10%	

Sample type Cell culture supernatant, Serum

Assay type Sandwich (quantitative)

Sensitivity < 10 pg/ml

**Range** 62.5 pg/ml - 4000 pg/ml

**Assay duration** Multiple steps standard assay

Species reactivity Reacts with: Mouse

Product overview Abcam's mouse IL-21 in vitro ELISA (Enzyme-Linked Immunosorbent Assay) kit is designed for

the accurate quantitative measurement of mouse IL-21 in cell culture supernatants and serum.

An IL-21 specific rat monoclonal antibody has been precoated onto 96-well plates. Standards and test samples are added to the wells and incubated. A biotinylated detection polyclonal antibody from goat, specific for IL-21 is then added followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex is added and unbound conjugates are washed away with PBS or TBS buffer. TMB is then used to visualize the HRP enzymatic reaction. TMB is catalyzed by HRP to produce a blue color product that changes into yellow after adding acidic stop solution. The density of yellow coloration is directly proportional to the mouse IL-21 amount of sample captured

in plate.

**Platform** Microplate

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#### **Properties**

### Storage instructions

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

Components	Identifier	1 x 96 tests	1 x 96 tests
ABC Diluent Buffer	Blue Cap	1 x 12ml	1 x 12ml
Antibody Diluent Buffer	Green Cap	1 x 12ml	1 x 12ml
Anti-mouse IL-21 antibody Microplate (12 x 8 wells)		1 unit	1 unit
Avidin-Biotin-Peroxidase Complex (ABC)		1 x 100µl	1 x 100µl
Biotinylated anti-mouse IL-21 antibody		1 x 100µl	1 x 100µl
Lyophilized recombinant mouse IL-21 standard		2 x 10ng	2 x 10ng
Plate Seal		4 units	4 units
Sample Diluent Buffer	Green Cap	1 x 30ml	1 x 30ml
TMB Color Developing Agent	Amber Bottle	1 x 10ml	1 x 10ml
TMB Stop Solution	Yellow Cap	1 x 10ml	1 x 10ml
Wash Buffer (25X)		1 x 20ml	1 x 20ml

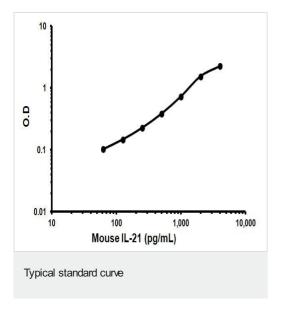
#### Relevance

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 g chain, gc, and mediates IL-21 signaling. Both IL-21R and the gc are necessary for the IL-21 function. IL-21 and its receptor activate JAKSTAT 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 ab171180

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