# abcam

# Product datasheet

# Human IL-7 ELISA Kit ab46031

1 References 1 Image

Overview

Product name Human IL-7 ELISA Kit

**Detection method**Colorimetric

Precision Intra-assay

Sample	n	Mean	SD	CV%
Sample A	8	198.7pg/ml	1.667	0.83%
Sample B	8	28.69pg/ml	1.118	3.86%

Inter-assay

Sample	n	Mean	SD	CV%
Sample A	29	198.9pg/ml	3.772	1.89%
Sample B	29	25.68pg/ml	1.505	5.84%

Sample type Cell culture supernatant, Serum, Plasma

Assay type Sandwich (quantitative)

Sensitivity < 3 pg/ml

**Range** 6.25 pg/ml - 200 pg/ml

 Recovery
 97.6 %

 Assay time
 2h 45m

Assay duration Multiple steps standard assay

Species reactivity Reacts with: Human

Product overview Abcam's IL-7 Human in vitro ELISA (Enzyme-Linked Immunosorbent Assay) kit is designed for

the quantitative measurement of IL-7 in Human serum, plasma, buffered solutions and cell culture

medium.

A monoclonal antibody specific for IL-7 has been coated onto the wells of the microtiter strips provided. Samples, including standards of known IL-7 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-7 are simultaneously incubated. After washing,

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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 reaction product. The intensity of this colored product is directly proportional to the concentration of IL-7 present in the samples.

This kit will recognize both endogenous and recombinant Human IL-7.

Get higher sensitivity in only 90 minutes with Human IL-7 ELISA Kit ( $\underline{ab185984}$ ) from our SimpleStep ELISA $^{\circledR}$  range.

**Platform** 

Microplate

#### **Properties**

# Storage instructions

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

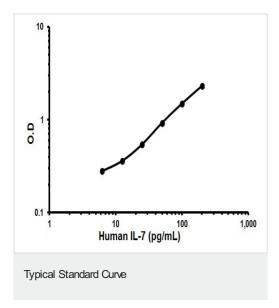
Components	Identifier	1 x 96 tests	2 x 96 tests
10X Standard Diluent Buffer	Black	1 x 15ml	1 x 25ml
200X Wash Buffer	White	1 x 10ml	2 x 10ml
Biotinylated Antibody Diluent	Red	1 x 7.5ml	1 x 13ml
Biotinylated anti-IL-7	Red	1 x 400µl	2 x 400µl
Chromogen TMB Substrate Solution		1 x 11ml	1 x 23ml
HRP Diluent	Red	1 x 12ml	1 x 23ml
IL-7 Control	Silver	2 vials	4 vials
IL-7 Microplate (12 x 8 well strip)		1 unit	2 units
IL-7 standard	Yellow	2 vials	4 vials
Standard Diluent (Serum)		1 x 7ml	2 x 7ml
Stop Reagent	Black	1 x 11ml	2 x 11ml
Streptavidin-HRP		2 x 5µl	4 x 5µl

#### Relevance

IL-7 is a cytokine important for B and T cell development. It and the hepatocyte growth factor form a heterodimer that functions as a pre-pro-B cell growth-stimulating factor. IL-7 is found to be a cofactor for V(D)J rearrangement of the T cell receptor beta (TCRB) during early T cell development. It can be produced locally by intestinal epithelial and epithelial goblet cells, and may serve as a regulatory factor for intestinal mucosal lymphocytes. Knockout studies in mice suggested that IL-7 plays an essential role in lymphoid cell survival.

### **Cellular localization**

Secreted



Representative Standard Curve using ab46031

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