

Datasheet for ABIN921099

## IL-7 ELISA Kit



[Go to Product page](#)

1 Image

1 Publication

### Overview

Quantity:	96 tests
Target:	IL-7 (IL7)
Binding Specificity:	AA 26-154
Reactivity:	Mouse
Method Type:	Sandwich ELISA
Detection Range:	15.6-1000 pg/mL
Minimum Detection Limit:	15.6 pg/mL
Application:	ELISA

### Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Mouse IL-7
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (EDTA)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: E.coli Immunogen sequence: E26-I154
Specificity:	Expression system for standard: E.coli Immunogen sequence: E26-I154
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

## Product Details

Sensitivity:	<1pg/mL
Material not included:	Microplate reader in standard size. Automated plate washer. Adjustable pipettes and pipette tips. Multichannel pipettes are recommended in the condition of large amount of samples in the detection. Clean tubes and Eppendorf tubes. Washing buffer (neutral PBS or TBS). Preparation of 0.01M TBS: Add 1.2g Tris, 8.5g NaCl

## Target Details

Target:	IL-7 (IL7)
Alternative Name:	IL7 ( <a href="#">IL7 Products</a> )
Background:	<p>Protein Function: Hematopoietic growth factor capable of stimulating the proliferation of lymphoid progenitors. It is important for proliferation during certain stages of B-cell maturation.</p> <p>Background: Interleukin 7(IL7) is a protein that is encoded by the IL7 gene in humans. The gene for human interleukin 7(IL7) maps to chromosome 8 by Southern analysis of a somatic cell hybrid panel and to 8q12-q13 by in situ hybridization. 1IL-7 is essential for survival and expansion of pathogenic T helper type 17(T(H)17) cells in experimental autoimmune encephalomyelitis(EAE).2</p> <p>Synonyms: Interleukin-7,IL-7,IL7,IL-7,</p> <p>Full Gene Name: Interleukin-7</p> <p>Cellular Localisation: Secreted.</p>
Gene ID:	16196
UniProt:	<a href="#">P10168</a>
Pathways:	<a href="#">JAK-STAT Signaling</a>

## Application Details

Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.
Plate:	Pre-coated
Protocol:	mouse IL-7 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from rat specific for IL-7 has been precoated onto 96-well plates. Standards(E.coli, E26-I154) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for IL-7 is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and

## Application Details

unbound conjugates were washed away with PBS or TBS buffer. HRP substrate TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the mouse IL-7 amount of sample captured in plate.

**Assay Procedure:** Aliquot 0.1 mL per well of the 1000pg/mL, 500pg/mL, 250pg/mL, 125pg/mL, 62.5pg/mL, 31.2pg/mL, 15.6pg/mL mouse IL-7 standard solutions into the precoated 96-well plate. Add 0.1 mL of the sample diluent buffer into the control well (Zero well). Add 0.1 mL of each properly diluted sample of mouse cell culture supernates, serum or plasma(EDTA) to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each mouse IL-7 standard solution and each sample be measured in duplicate.

**Assay Precision:**

- Sample 1: n=16, Mean(pg/ml): 47.8, Standard deviation: 2.49, CV(%): 5.2
- Sample 2: n=16, Mean(pg/ml): 376, Standard deviation: 13.16, CV(%): 3.5
- Sample 3: n=16, Mean(pg/ml): 755, Standard deviation: 35.49, CV(%): 4.7,
- Sample 1: n=24, Mean(pg/ml): 52.5, Standard deviation: 3.31, CV(%): 6.3
- Sample 2: n=24, Mean(pg/ml): 388, Standard deviation: 32.59, CV(%): 8.4
- Sample 3: n=24, Mean(pg/ml): 746, Standard deviation: 40.3, CV(%): 5.4

**Restrictions:** For Research Use only

## Handling

**Handling Advice:** Avoid multiple freeze-thaw cycles.

**Storage:** -20 °C, 4 °C

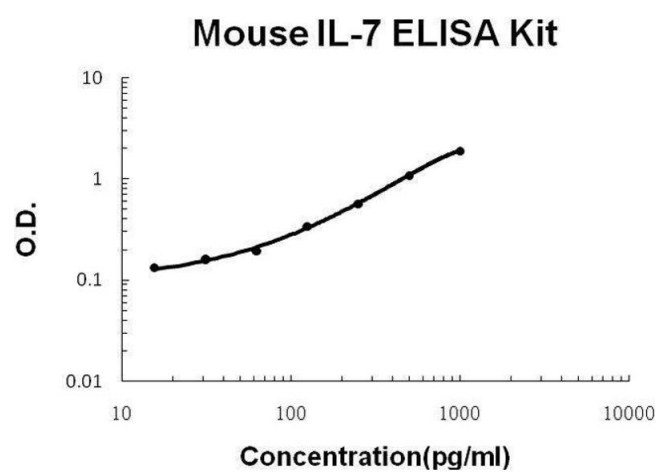
**Storage Comment:** Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles

**Expiry Date:** 12 months

## Publications

**Product cited in:** Esfahani, Saidijam, Najafi, Goodarzi, Movahedian: "The effect of salusin-β on expression of pro- and anti-inflammatory cytokines in human umbilical vein endothelial cells (HUVECs)." in: **ARYA atherosclerosis**, Vol. 14, Issue 1, pp. 1-10, (2018) ([PubMed](#)).

McCarthy: "Management. The name game." in: **Nursing times**, Vol. 85, Issue 1, pp. 44-5, (1989) ([PubMed](#)).



**ELISA**

**Image 1.** Mouse IL-7 PicoKine ELISA Kit standard curve