

Datasheet for ABIN2859234  
**IL-34 ELISA Kit**[Go to Product page](#)

## 1 Image

## Overview

Quantity:	96 tests
Target:	IL-34 (IL34)
Binding Specificity:	AA 21-242
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	62.5-4000 pg/mL
Minimum Detection Limit:	62.5 pg/mL
Application:	ELISA

## Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human IL-34
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: E.coli Immunogen sequence: N21-P242
Specificity:	Expression system for standard: E.coli Immunogen sequence: N21-P242
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

## Product Details

Sensitivity:	<10pg/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-34 (IL34)
Alternative Name:	IL34 ( <a href="#">IL34 Products</a> )
Background:	<p>Protein Function: Cytokine that promotes the proliferation, survival and differentiation of monocytes and macrophages. Promotes the release of proinflammatory chemokines, and thereby plays an important role in innate immunity and in inflammatory processes. Plays an important role in the regulation of osteoclast proliferation and differentiation, and in the regulation of bone resorption. Signaling via CSF1R and its downstream effectors stimulates phosphorylation of MAPK1/ERK2 AND MAPK3/ERK1. .</p> <p>Background: Interleukin-34, or IL-34 is a protein belonging to a group of cytokines called interleukins. It is mapped to 16q22.1. The discovery of IL-34 protein in the red pulp of the spleen suggests involvement in growth and development of myeloid cells, consistent with its activity on monocytes. IL-34 is a recently discovered cytokine that acts on tissue resident macrophages and Langerhans cells upon binding the receptor for CSF-1, CSF-1R. It also can promote the differentiation and viability of monocytes and macrophages through the colony-stimulating factor-1 receptor. In addition, it promotes the development, survival, and function of microglia and Langerhans cells, therefore, this cytokine may predominately function in brain and skin biology.</p> <p>Synonyms: Interleukin-34,IL-34,IL34,C16orf77,</p> <p>Full Gene Name: Interleukin-34</p> <p>Cellular Localisation: Secreted.</p>
Gene ID:	146433
UniProt:	<a href="#">Q6ZMJ4</a>
Pathways:	<a href="#">RTK Signaling</a>

## Application Details

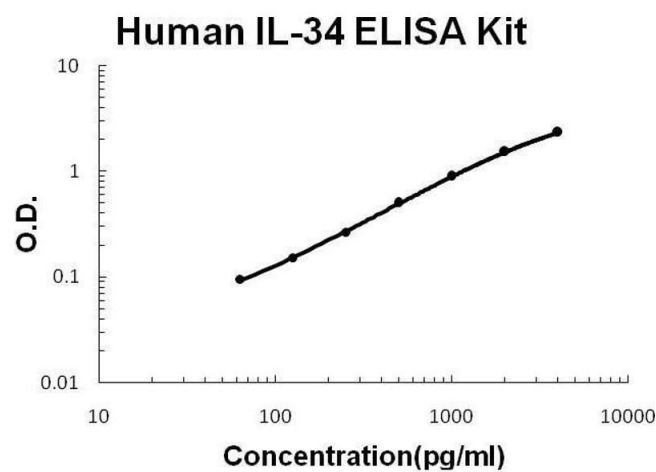
Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well
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## Application Details

	assay was recommended for both standard and sample testing.
Comment:	Tissue Specificity: Detected in the sinusoidal epithelium in the red pulp of spleen (at protein level). Predominantly expressed in spleen. Also detected in a range of other tissues including heart, brain, lung, liver, kidney, thymus, testis, ovary, small intestine, prostate and colon. .
Plate:	Pre-coated
Protocol:	human IL-34 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for IL-34 has been precoated onto 96-well plates. Standards(E.coli, N21-P242) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for IL-34 is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and 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 human IL-34 amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 4000pg/mL, 2000pg/mL,1000pg/mL, 500pg/mL, 250pg/mL, 125pg/mL, 62.5pg/mL human IL-34 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 human cell culture supernates, serum or plasma(heparin, EDTA) to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each human IL-34 standard solution and each sample be measured in duplicate.
Assay Precision:	<ul style="list-style-type: none"><li>• Sample 1: n=16, Mean(pg/ml): 514, Standard deviation: 23.13, CV(%): 4.5</li><li>• Sample 2: n=16, Mean(pg/ml): 1680, Standard deviation: 65.52, CV(%): 3.9</li><li>• Sample 3: n=16, Mean(pg/ml): 2641, Standard deviation: 97.72, CV(%): 3.7,</li><li>• Sample 1: n=24, Mean(pg/ml): 535, Standard deviation: 33.17, CV(%): 6.2</li><li>• Sample 2: n=24, Mean(pg/ml): 1693, Standard deviation: 103.3, CV(%): 6.1</li><li>• Sample 3: n=24, Mean(pg/ml): 2709, Standard deviation: 130, CV(%): 4.8</li></ul>
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



**ELISA**

**Image 1.** Human IL-34 PicoKine ELISA Kit standard curve