

## Product datasheet

# Human IL-34 ELISA Kit ab235640

Recombinant SimpleStep ELISA

[5 Images](#)

### Overview

**Product name** Human IL-34 ELISA Kit

**Detection method** Colorimetric

**Precision**

Intra-assay

Sample	n	Mean	SD	CV%
Milk	9			8%

Inter-assay

Sample	n	Mean	SD	CV%
Milk	3			11.6%

**Sample type**

Cell culture supernatant, Saliva, Milk, Serum, Hep Plasma, EDTA Plasma, Cit plasma

**Assay type**

Sandwich (quantitative)

**Sensitivity**

3.4 pg/ml

**Range**

28.1 pg/ml - 1800 pg/ml

**Recovery**

Sample specific recovery

Sample type	Average %	Range
Saliva	106	104% - 110%
Milk	113	111% - 115%
Serum	84	81% - 88%
Cell culture media	110	108% - 111%
Hep Plasma	89	87% - 90%
EDTA Plasma	92	89% - 96%

Sample type	Average %	Range
Cit plasma	86	84% - 88%

**Assay time**

1h 30m

**Assay duration**

One step assay

**Species reactivity**

**Reacts with:** Human

**Product overview**

Human IL-34 ELISA Kit (ab235640) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of IL-34 protein in cell culture supernatant, cit plasma, edta plasma, hep plasma, milk, saliva, and serum. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human IL-34 with 3.4 pg/ml sensitivity.

SimpleStep ELISA® technology employs capture antibodies conjugated to an affinity tag that is recognized by the monoclonal antibody used to coat our SimpleStep ELISA® plates. This approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. See the SimpleStep ELISA® protocol summary in the image section for further details. Our SimpleStep ELISA® technology provides several benefits:

- Single-wash protocol reduces assay time to 90 minutes or less
- High sensitivity, specificity and reproducibility from superior antibodies
- Fully validated in biological samples
- 96-wells plate breakable into 12 x 8 wells strips

A 384-well SimpleStep ELISA® microplate ([ab203359](#)) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.

**Platform**

Pre-coated microplate (12 x 8 well strips)

**Properties**

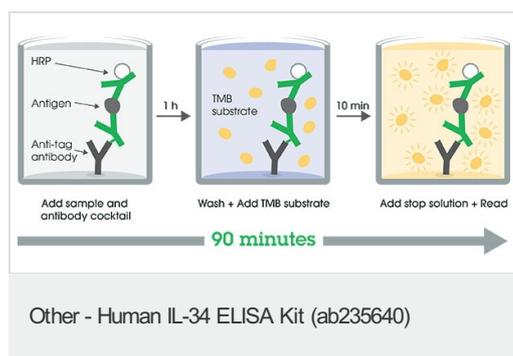
**Storage instructions** Store at +4°C. Please refer to protocols.

Components	1 x 96 tests
10X Human IL-34 Capture Antibody	1 x 600µl
10X Human IL-34 Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent CPR	1 x 6ml
Human IL-34 Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent 50BP	1 x 20ml

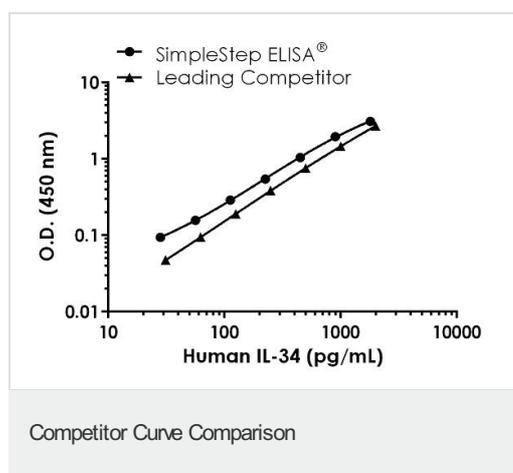
Components	1 x 96 tests
Sample Diluent NS (ab193972)	1 x 12ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

<b>Function</b>	Cytokine that promotes the differentiation and viability of monocytes and macrophages. Stimulates phosphorylation of MAPK1/ERK2 AND MAPK3/ERK1. Ligand for colony-stimulating factor-1 receptor CSF1R.
<b>Tissue specificity</b>	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.
<b>Sequence similarities</b>	Belongs to the IL-34 family.
<b>Cellular localization</b>	Secreted.

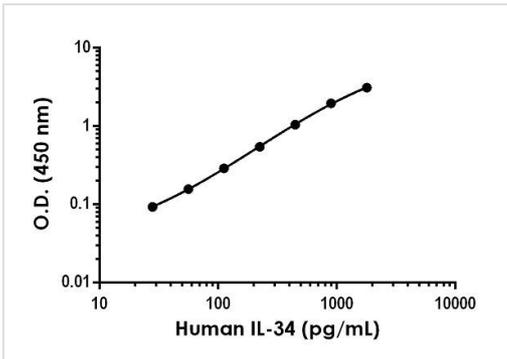
## Images



SimpleStep ELISA technology allows the formation of the antibody-antigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.

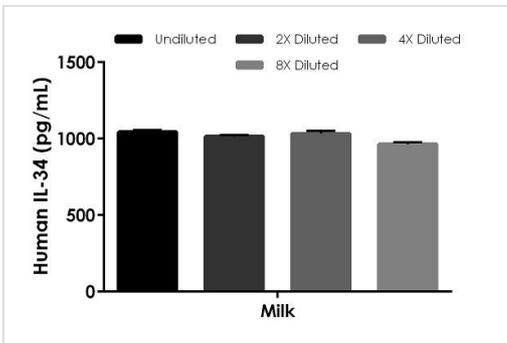


Standard curve comparison between human IL-34 SimpleStep ELISA<sup>®</sup> kit and traditional ELISA kit from leading competitor. SimpleStep ELISA kit shows increased sensitivity.



Example of human IL-34 standard curve in Sample Diluent 50BP.

The IL-34 standard curve was prepared as described in Section 10. Raw data values are shown in the table. Background-subtracted data values (mean +/- SD) are graphed.



Interpolated concentrations of native IL-34 in human milk samples.

The concentrations of IL-34 were measured in duplicates, interpolated from the IL-34 standard curves and corrected for sample dilution. Undiluted samples are as follows: milk 18.75%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean IL-34 concentration was determined to be 1,014 pg/mL in neat human milk.

Powered by  
recombinant antibodies

**Research with confidence**  
Consistent and reproducible results

**Long-term and scalable supply**  
Recombinant technology

**Success from the first experiment**  
Confirmed specificity

**Ethical standards compliant**  
Animal-free production

Sandwich ELISA - Human IL-34 ELISA Kit  
(ab235640)

To learn more about the advantages of recombinant antibodies see [here](#).

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

## **Our Abpromise to you: Quality guaranteed and expert technical support**

---

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
  
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

## **Terms and conditions**

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors