

Product datasheet

Human IL-17A ELISA Kit ab216167

Recombinant SimpleStep ELISA

[8 References](#) [8 Images](#)

Overview

Product name Human IL-17A ELISA Kit

Detection method Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%
Overall	3			10.1%

Inter-assay

Sample	n	Mean	SD	CV%
Overall	5			6.8%

Sample type

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

Assay type

Sandwich (quantitative)

Sensitivity

2.6 pg/ml

Range

3.125 pg/ml - 200 pg/ml

Recovery

Sample specific recovery

Sample type	Average %	Range
Serum	97	97% - 98%
Cell culture media	92	82% - 108%
Hep Plasma	96	86% - 115%
EDTA Plasma	106	104% - 110%
Cit plasma	101	94% - 108%

Assay time

1h 30m

Assay duration

One step assay

Species reactivity**Reacts with:** Human**Product overview**

Human IL-17A ELISA Kit (ab216167) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of IL-17A protein in cell culture supernatant, cit plasma, edta plasma, hep plasma, and serum. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human IL-17A with 1.1 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.

Notes

IL-17A is a proinflammatory cytokine that is secreted by activated T cells. It is a disulfide-linked homodimer with both glycosylated and nonglycosylated forms. IL-17A induces stromal cells to produce proinflammatory and hematopoietic cytokines, and also enhances the surface expression of ICAM1/intracellular adhesion molecule 1 in fibroblasts.

Platform

Pre-coated microplate (12 x 8 well strips)

Properties**Storage instructions**

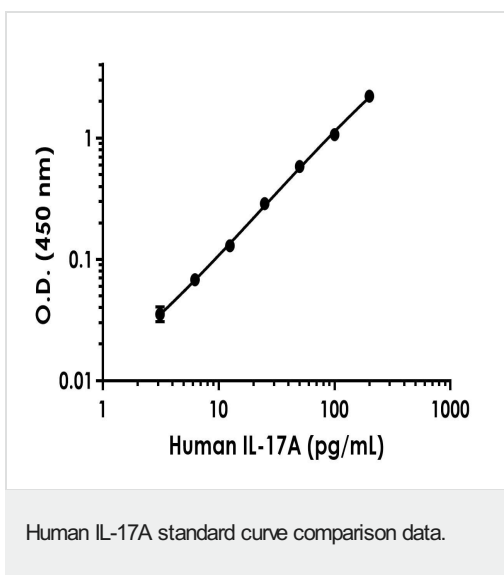
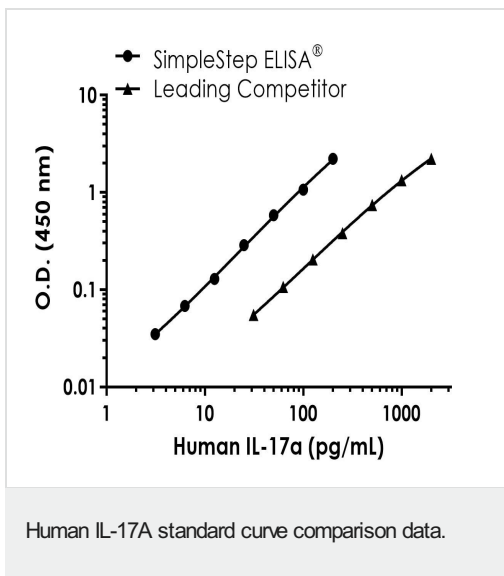
Store at +4°C. Please refer to protocols.

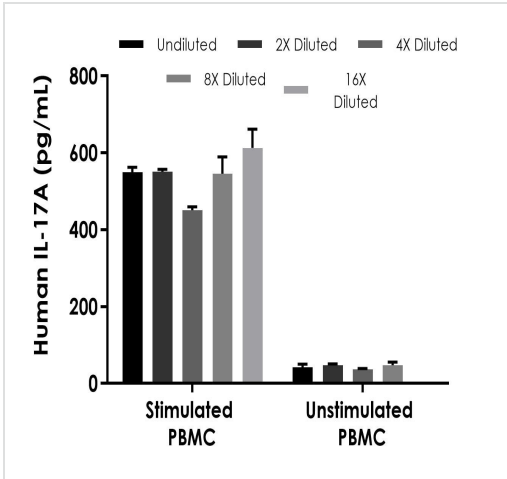
Components	1 x 96 tests
10X Human IL-17A Capture Antibody	1 x 600µl
10X Human IL-17A Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent 5BI	1 x 6ml
Human IL-17A Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent NS (ab193972)	1 x 50ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml

Components	1 x 96 tests
TMB Development Solution	1 x 12ml

Function	Induces stromal cells to produce proinflammatory and hematopoietic cytokines. Enhances the surface expression of the intracellular adhesion molecule-1 (ICAM-1) in fibroblasts.
Tissue specificity	Restricted to activated memory T-cells.
Sequence similarities	Belongs to the IL-17 family.
Post-translational modifications	Found both in glycosylated and nonglycosylated forms.
Cellular localization	Secreted.

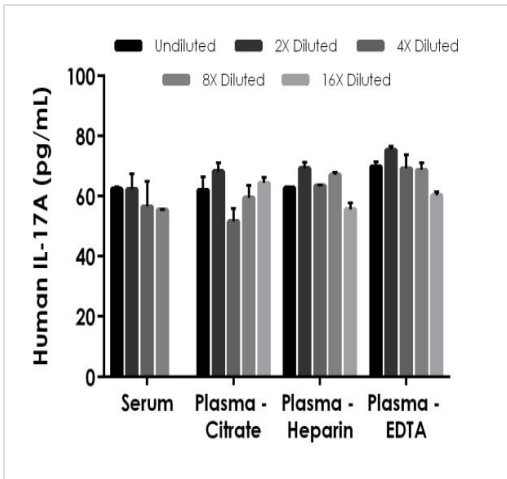
Images





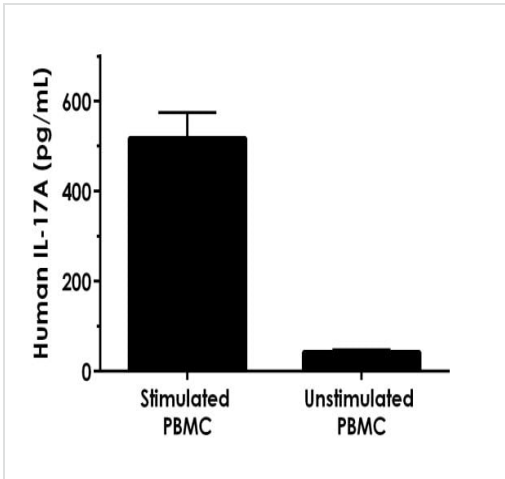
Interpolated concentrations of native IL-17A in PHA-M stimulated and unstimulated human PBMC cell culture supernatant samples.

The concentrations of IL-17A were measured in duplicates, interpolated from the IL-17A standard curves and corrected for sample dilution. Undiluted samples are as follows: stimulated PBMC supernatant 10%, and unstimulated PBMC supernatant 100%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean IL-17A concentration was determined to be 542 pg/mL in neat PHA-M stimulated PBMC supernatant and 43.6 pg/mL in neat unstimulated PBMC supernatant.



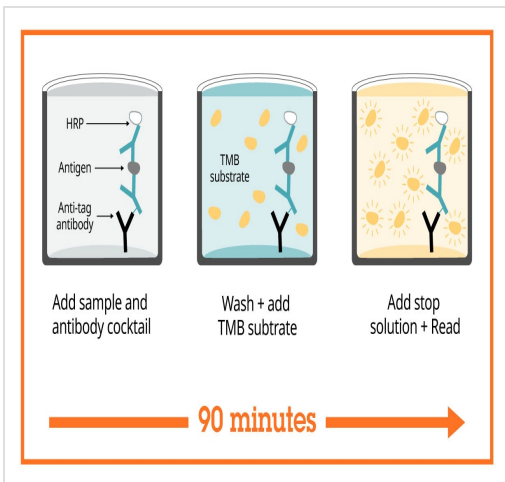
Interpolated concentrations of spike IL-17A in human serum and plasma samples.

The concentrations of IL-17A were measured in duplicates, interpolated from the IL-17A standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 50%, plasma (citrate) 50%, plasma (heparin) 50%, plasma (EDTA) 50%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2).



Comparison of IL-17A in unstimulated and PHA-M stimulated human PBMC cell supernatants.

Human PBMC cells were cultured in the absence or presence of 1.5% PHA-M for 46 hours. The concentrations of IL-17A were measured in supernatant samples in 5 different dilutions in duplicates and interpolated from the IL-17 A standard curve. The interpolated values are plotted (mean +/- SD, n=5). The mean IL-17 A concentration was determined to be 542 pg/mL in neat PHA-M stimulated PBMC cell supernatant, 43.6 pg/mL in neat unstimulated supernatants and undetectable in neat media (not shown).



Sandwich ELISA - Human IL-17A ELISA Kit (ab216167)

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.

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-17A ELISA Kit (ab216167)

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

Get more done with SimpleStep ELISA



Easy to use
Single-wash 90-minute protocol



Flexible
Matched antibody pairs available



Precision antibodies
High sensitivity, specificity and reproducibility



Scalable
Now in 10-pack and 384-well formats

Sandwich ELISA - Human IL-17A ELISA Kit
(ab216167)

To learn more about the advantages of SimpleStep ELISA® kits see [here](#).

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

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