abcam

Product datasheet

Mouse IL-17A ELISA Kit ab199081

Recombinant SimpleStep ELISA

7 References 7 Images

Overview

Product name Mouse IL-17A ELISA Kit

Detection method Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%
Serum	5			4.9%

Inter-assay

Sample	n	Mean	SD	CV%
Serum	3			10.6%

Sample type Cell culture supernatant, Serum, Cit plasma

Assay type Sandwich (quantitative)

Sensitivity 0.5 pg/ml

Range 6.25 pg/ml - 400 pg/ml

Recovery

Sample specific recovery

Sample type	Average %	Range
Serum	102.5	97.7% - 105.8%
Cell culture media	91.1	82.7% - 99.7%
Cit plasma	103.6	102.2% - 105.8%

Assay time 1h 30m

Assay duration One step assay

Species reactivity **Reacts with:** Mouse

Product overview Mouse IL-17A ELISA Kit (ab199081) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of IL-17A protein in cell culture supernatant, cit plasma, and serum. It

uses our proprietary SimpleStep ELISA® technology. Quantitate Mouse IL-17A with 0.5 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 pro-inflammatory cytokine that is secreted by a subset of activated T cells. It is a disulfide-linked homodimer with both glycosylated and non-glycosylated forms. IL-17A induces stromal cells to produce pro-inflammatory and hematopoietic cytokines, and also enhances the surface expression of ICAM1/intracellular adhesion molecule 1 in fibroblasts.

Platform Microplate (12 x 8 well strips)

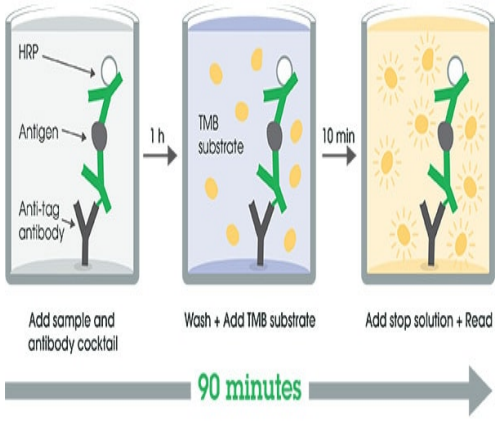
Properties

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

Components	1 x 96 tests	1 x 96 tests
10X Mouse IL-17a Capture Antibody	1 x 600µl	1 x 600µl
10X Mouse IL-17a Detector Antibody	1 x 600µl	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml	1 x 20ml
Antibody Diluent CPI2	1 x 6ml	1 x 6ml
Mouse IL-17a Lyophilized Recombinant Protein	2 vials	2 vials
Plate Seals	1 unit	1 unit
Sample Diluent 25BP	1 x 20ml	1 x 20ml
Sample Diluent NS (ab193972)	1 x 50ml	1 x 50ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit	1 unit
Stop Solution	1 x 12ml	1 x 12ml
TMB Development Solution	1 x 12ml	1 x 12ml

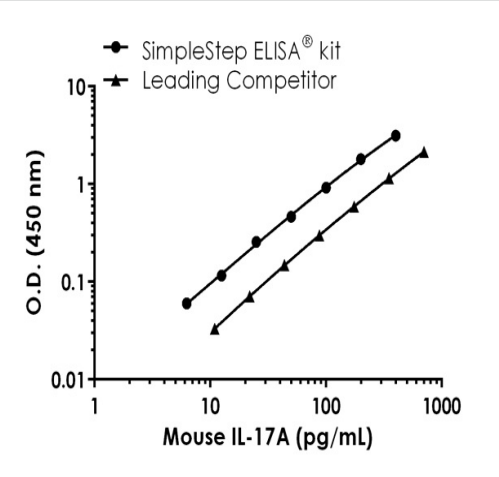
Function	Induces stromal cells to produce proinflammatory and hematopoietic cytokines. Enhances the surface expression of the intracellular adhesion molecule-1 (ICAM-1) in fibroblasts.
Tissue specificity	Restricted to activated memory T-cells.
Sequence similarities	Belongs to the IL-17 family.
Post-translational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

Images



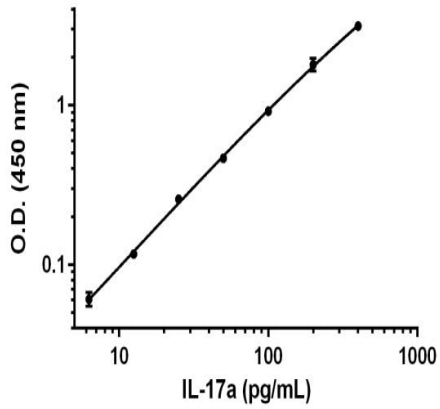
Other - Mouse IL-17A ELISA Kit (ab199081)

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.



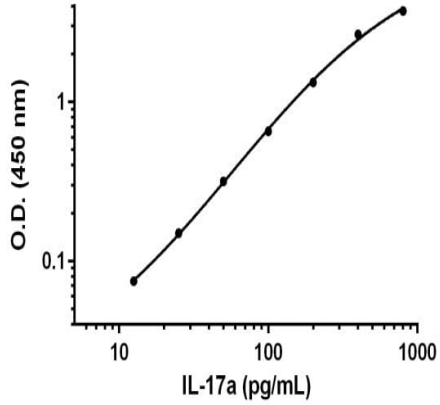
Mouse IL-17A standard curve comparison data.

Standard curve comparison between mouse IL-17A SimpleStep ELISA® kit and traditional ELISA kit from leading competitor. SimpleStep ELISA kit shows a 9-fold increase in sensitivity.



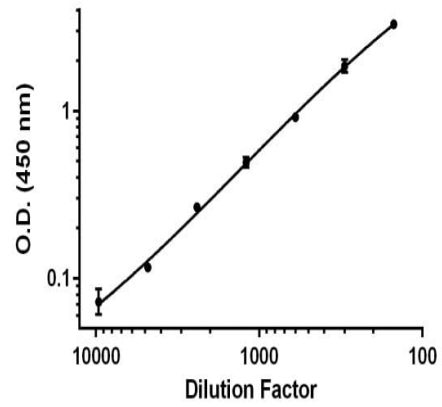
Example of IL-17a standard curve prepared in Sample Diluent NS.

Background-subtracted data values (mean +/- SD) are graphed.



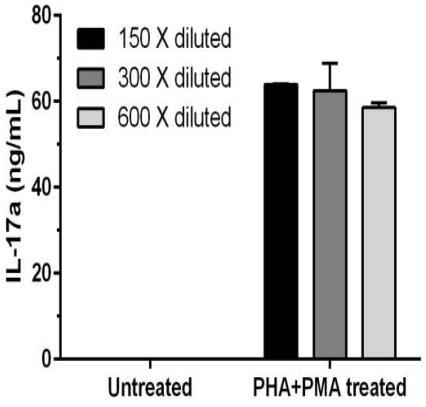
Example of IL-17a standard curve prepared in Sample Diluent 25BP.

Background-subtracted data values (mean +/- SD) are graphed.



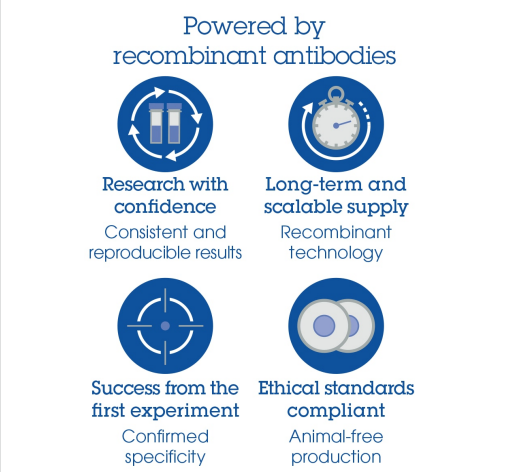
Demonstration of the linearity of dilution of the assay.

Titration of PHA+PMA stimulated EL4 cell culture supernatant within the working range of the assay. EL4 cells were cultured in the presence of 1.5% phytohemagglutinin (PHA) and 10 ng/mL phorbol 12-myristate 13-acetate (PMA) for 48 hours. The cell culture supernatant was collected and measured in 2-fold dilution series. Background-subtracted data values (mean +/- SD, n = 2) are graphed.



PHA+PMA treatment of EL4 cells stimulates secretion of IL-17a.

EL4 cells were cultured in the absence or presence of 1.5% PHA and 10 ng/mL PMA for 48 hours. The cell culture supernatants were collected and their dilutions (as indicated) were measured with this kit. Interpolated concentrations of IL-17a adjusted for sample dilution are graphed in ng of IL-17a per mL of supernatant (mean +/- SD, n = 2). Note that IL-17a is not detectable in the untreated EL4 supernatant samples.



Sandwich ELISA - Mouse IL-17A ELISA Kit

(ab199081)

To learn more about the advantages of recombinant antibodies see **here**.

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