

Human IL-10 ELISA Kit, Fluorescent ab229436

Recombinant CatchPoint® SimpleStep ELISA®

5 Images

Overview

Product name Human IL-10 ELISA Kit, Fluorescent

Detection method Fluorescent

Precision Intra-assay

Sample	n	Mean	SD	CV%
supernatant	5			5.2%

Inter-assay

Sample	n	Mean	SD	CV%
supernatant	3			3.2%

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

Assay type Sandwich (quantitative)

Sensitivity 2.1 pg/ml

Range 2.3 pg/ml - 4800 pg/ml

Recovery Sample specific recovery

Sample type	Average %	Range
Cell culture supernatant	108	105% - 111%
Serum	109	108% - 112%
Cell culture media	106	102% - 111%
Hep Plasma	116	113% - 117%
EDTA Plasma	109	103% - 118%
Cit plasma	111	105% - 119%

Assay time	1h 30m
Assay duration	One step assay
Species reactivity	Reacts with: Human Does not react with: Cow
Product overview	IL-10 <i>in vitro</i> CatchPoint SimpleStep ELISA (Enzyme-Linked Immunosorbent Assay) kit is designed for the quantitative measurement of IL-10 protein in human serum, plasma, and cell culture supernatant samples

The CatchPoint SimpleStep ELISA employs an affinity tag labeled capture antibody and a reporter conjugated detector antibody which immunocapture the sample analyte in solution. This entire complex (capture antibody/analyte/detector antibody) is in turn immobilized via immunoaffinity of an anti-tag antibody coating the well. To perform the assay, samples or standards are added to the wells, followed by the antibody mix. After incubation, the wells are washed to remove unbound material. CatchPoint HRP Development Solution containing the Stoplight Red Substrate is added. During incubation, the substrate is catalyzed by HRP generating a fluorescent product. Signal is generated proportionally to the amount of bound analyte and the intensity is measured in a fluorescence plater reader at 530/570/590 nm Excitation/Cutoff/Emission.

Interleukin 10 (IL-10) is a cytokine involved in immunoregulation through the promotion of Th2 response and inhibition of Th1 responses. It is produced by cells of hematopoietic origin, keratinocytes, placental cytotrophoblasts, and hepatic stellate cells.

Platform	Pre-coated microplate (12 x 8 well strips)
-----------------	--

Properties

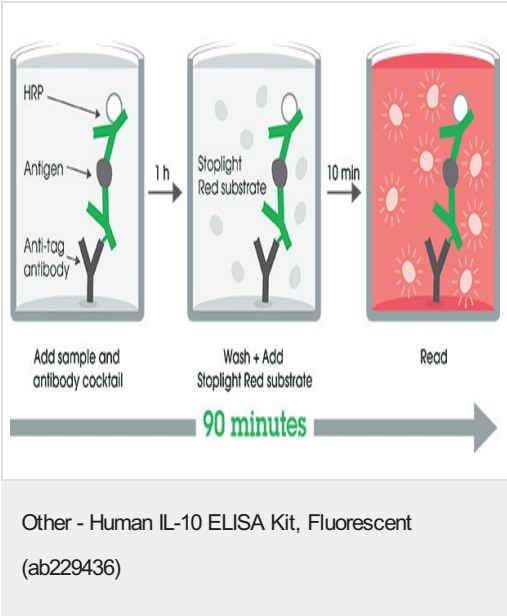
Storage instructions	Store at +4°C. Please refer to protocols.
-----------------------------	---

Components	1 x 96 tests
100X Stoplight Red Substrate	1 x 120µl
10X Human IL-10 Capture Antibody	1 x 600µl
10X Human IL-10 Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
500X Hydrogen Peroxide (H2O2, 3%)	1 x 50µl
50X Cell Extraction Enhancer Solution (ab193971)	1 x 1ml
Antibody Diluent CPI - HAMA Blocker (ab193969)	1 x 6ml
Human IL-10 Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent NBP	1 x 20ml

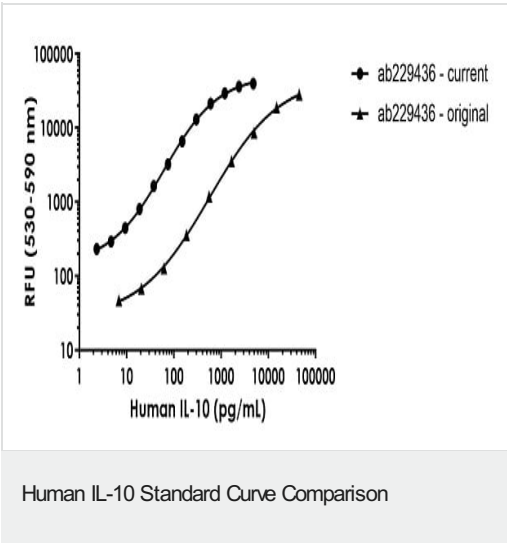
Components	1 x 96 tests
Sample Diluent NS (ab193972)	1 x 50ml
SimpleStep Pre-Coated Black 96-Well Microplate	1 unit
Stoplight Red Substrate Buffer	1 x 12ml

Function	Inhibits the synthesis of a number of cytokines, including IFN-gamma, IL-2, IL-3, TNF and GM-CSF produced by activated macrophages and by helper T-cells.
Tissue specificity	Produced by a variety of cell lines, including T-cells, macrophages, mast cells and other cell types.
Sequence similarities	Belongs to the IL-10 family.
Cellular localization	Secreted.

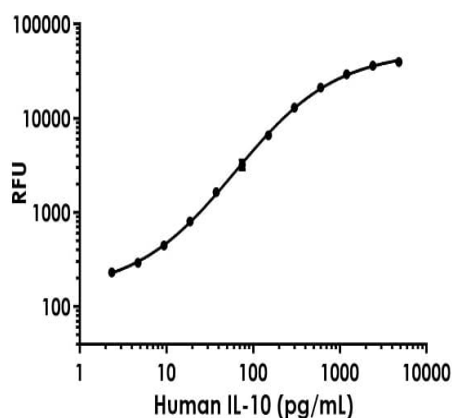
Images



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.

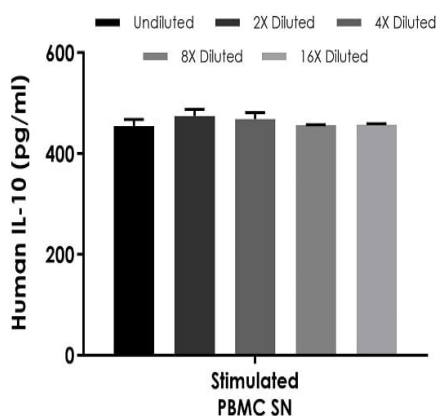


Standard Curve comparison between human IL-10 current (new) SimpleStep ELISA kit and original ELISA kit. The current SimpleStep ELISA kit shows increased sensitivity.



Example of human IL-10 standard curve in Sample Diluent NS + Enhancer.

The IL-10 standard curve was prepared as described in Section 10. Raw data generated on SpectraMax M4 Multi-Mode Microplate Reader is shown in the table. Background-subtracted data values (mean \pm SD) are graphed.



Interpolated concentrations of native IL-10 in human PBMC cell culture supernatant samples.

The concentrations of IL-10 were measured in duplicates, interpolated from the IL-10 standard curves and corrected for sample dilution. Undiluted samples are as follows: stimulated PBMC cell culture supernatant 50%. The interpolated dilution factor corrected values are plotted (mean \pm SD, $n=2$). The mean IL-10 concentration was determined to be 462 pg/ml in stimulated PBMC cell culture supernatant. PBMC cell culture supernatant samples were stimulated for 46 hours with 1.5% PHA. Unstimulated PBMC cell culture supernatant samples were also measured; all values were below the detectable range of the assay.

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-10 ELISA Kit,
Fluorescent (ab229436)

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