

## Product datasheet

### Human IL-22 ELISA Kit ab216170

Recombinant SimpleStep ELISA

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#### Overview

**Product name** Human IL-22 ELISA Kit

**Detection method** Colorimetric

**Precision**

Intra-assay

Sample	n	Mean	SD	CV%
Overall	8			4.6%

Inter-assay

Sample	n	Mean	SD	CV%
Overall	3			2.6%

**Sample type**

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

**Assay type**

Sandwich (quantitative)

**Sensitivity**

2.61 pg/ml

**Range**

13.12 pg/ml - 840 pg/ml

**Recovery**

Sample specific recovery

Sample type	Average %	Range
Cell culture supernatant	101	98% - 104%
Urine	107	101% - 111%
Serum	102	100% - 104%
Hep Plasma	102	99% - 104%
EDTA Plasma	102	100% - 105%
Cit plasma	93	91% - 97%

<b>Assay time</b>	1h 30m
<b>Assay duration</b>	One step assay
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Does not react with:</b> Cow
<b>Product overview</b>	Human IL-22 ELISA Kit (ab216170) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of IL-22 protein in cell culture supernatant, cit plasma, edta plasma, hep plasma, serum, and urine. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human IL-22 with 2.61 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.

<b>Notes</b>	Interleukin 22 (IL-22) is a cytokine thought to be involved in the response to inflammation through the Jak/STAT and MAPK signaling pathways. IL-22 is produced by NK cells and Th1-type T cells and can stimulate the induction of pro-inflammatory cytokines in human keratinocytes.
<b>Platform</b>	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-22 Capture Antibody	1 x 600µl
10X Human IL-22 Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent CPI - HAMA Blocker (ab193969)	1 x 6ml
Human IL-22 Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit

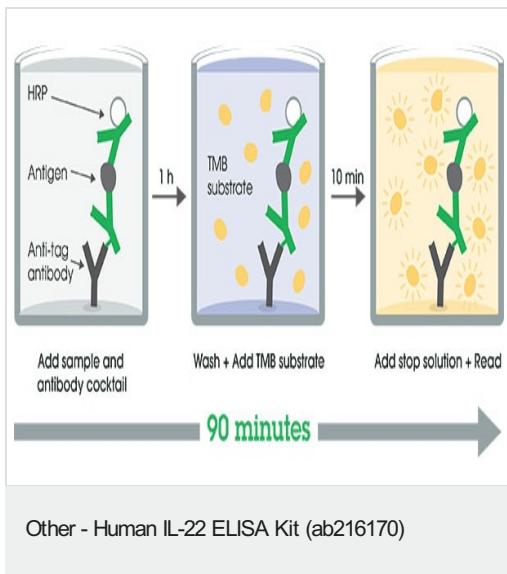
Components	1 x 96 tests
Sample Diluent 50BS	1 x 20ml
Sample Diluent NS (ab193972)	1 x 50ml
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

**Function** Cytokine that contributes to the inflammatory response in vivo.

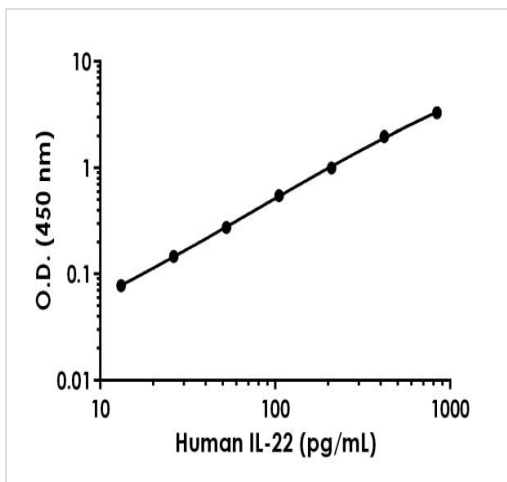
**Sequence similarities** Belongs to the IL-10 family.

**Cellular localization** Secreted.

## Images

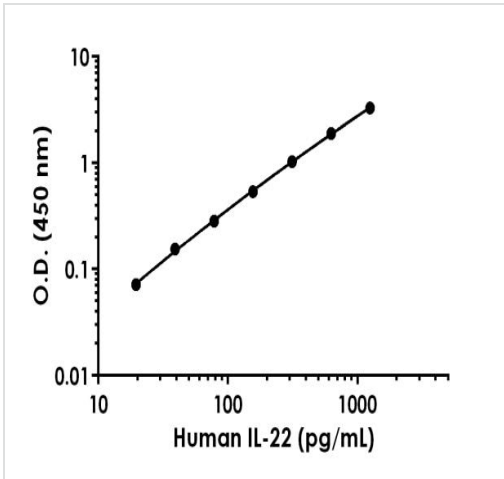


SimpleStep ELISA technology allows the formation of the antibody-antigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.



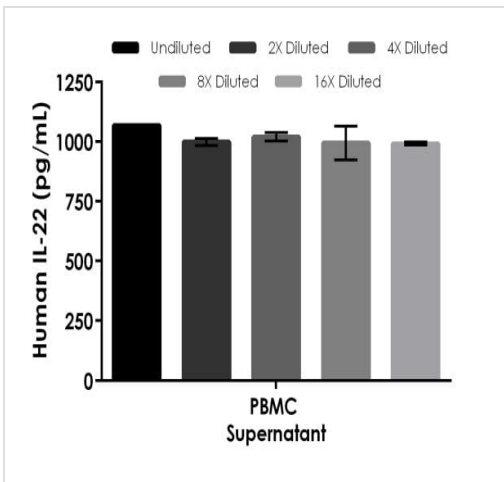
Background-subtracted data values (mean +/- SD) are graphed.

Example of human IL-22 standard curve in Sample Diluent NS.



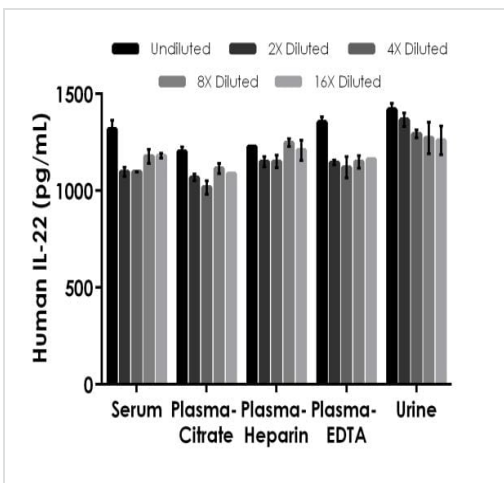
Example of human IL-22 standard curve in Sample Diluent 50BS.

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



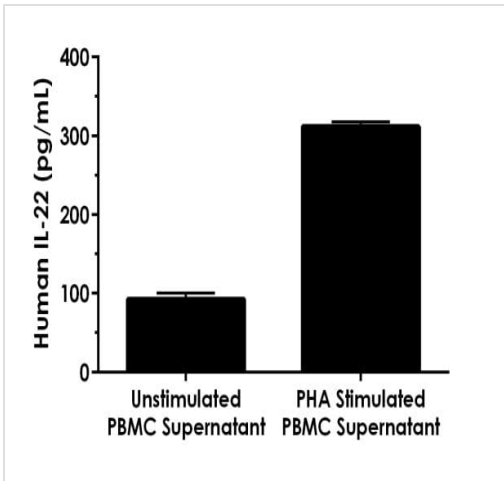
Interpolated concentrations of spiked IL-22 in PBMC cell culture supernatant sample.

The concentrations of IL-22 were measured in duplicates, interpolated from the IL-22 standard curves and corrected for sample dilution. Undiluted samples are as follows: PBMC supernatant 50%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean spiked IL-22 concentration was determined to be 1015 pg/mL in PBMC supernatant.



Interpolated concentrations of spike IL-22 in human serum, plasma and urine samples.

The concentrations of IL-22 were measured in duplicates, interpolated from the IL-22 standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 50%, plasma (citrate) 50%, plasma (heparin) 50%, plasma (EDTA) 50% and urine 50%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean spiked IL-22 concentration was determined to be 1174 pg/mL in serum, 1099 pg/mL in plasma (citrate), 1197 pg/mL in plasma (heparin), 1189 pg/mL in plasma (EDTA) and 1,322 pg/mL in urine.



Human peripheral blood mononuclear cells were cultured unstimulated or stimulated with 10 µg/mL PHA.

Conditioned media was harvested after 48 hours. IL-22 was measured in 50% unstimulated and PHA stimulated PBMC supernatant. The concentrations of IL-22 were measured in duplicate, interpolated from the IL-22 standard curves and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean IL-22 concentration was determined to be 316 pg/mL in PHA stimulated PBMC supernatant and 93 pg/mL in unstimulated supernatant.

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Sandwich ELISA - Human IL-22 ELISA Kit  
(ab216170)

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"

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