

## Product datasheet

# Human CXCL9 ELISA Kit ab219047

Recombinant SimpleStep ELISA

[11 Images](#)

### Overview

**Product name** Human CXCL9 ELISA Kit

**Detection method** Colorimetric

#### Precision

Intra-assay

Sample	n	Mean	SD	CV%
Overall	3			3.4%

Inter-assay

Sample	n	Mean	SD	CV%
Overall	5			5.9%

**Sample type**

Cell culture supernatant, Serum, Cell culture extracts, Tissue Extracts, EDTA Plasma, Cit plasma

**Assay type**

Sandwich (quantitative)

**Sensitivity**

5 pg/ml

**Range**

28.13 pg/ml - 1800 pg/ml

#### Recovery

Sample specific recovery

Sample type	Average %	Range
Cell culture supernatant	90	86% - 92%
Serum	115	103% - 131%
Tissue Extracts	109	104% - 116%
EDTA Plasma	109	99% - 125%
Cit plasma	119	110% - 127%

**Assay time**

1h 30m

**Assay duration**

One step assay

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

Human CXCL9 ELISA Kit (ab219047) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of CXCL9 protein in cell culture extracts, cell culture supernatant, cit plasma, edta plasma, serum, and tissue extracts. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human CXCL9 with 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**

CXCL9, is a small cytokine belonging to the CXC chemokine subfamily that lacks an ELR motif in front of the first cysteine. CXCL9, also known as MIG, (Monokine Induced by Gamma Interferon) is a T-cell chemoattractant, which is induced by Interferon Gamma. This subfamily also includes Interferon Gamma Induced Protein 10 (IP-10 or CXCL10) and Interferon Inducible T-cell Alpha Chemoattractant (I-TAC or CXCL11) whose genes are located near the gene for MIG on human chromosome 4. MIG, IP-10 and I-TAC all elicit their chemotactic functions by interacting with the G protein coupled chemokine receptor CXCR3 (GPR9 or CD183).

Abcam has not and does not intend to apply for the REACH Authorisation of customers' uses of products that contain European Authorisation list (Annex XIV) substances.

It is the responsibility of our customers to check the necessity of application of REACH Authorisation, and any other relevant authorisations, for their intended uses.

**Platform**

Pre-coated microplate (12 x 8 well strips)

**Properties****Storage instructions**

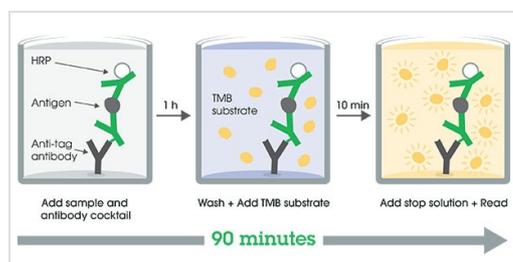
Store at +4°C. Please refer to protocols.

Components	1 x 96 tests
10X Human CXCL9 Capture Antibody	1 x 600µl
10X Human CXCL9 Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
50X Cell Extraction Enhancer Solution (ab193971)	1 x 1ml

Components	1 x 96 tests
5X Cell Extraction Buffer PTR (ab193970)	1 x 10ml
Antibody Diluent 4BI	1 x 6ml
Human CXCL9 Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent 25BP	1 x 20ml
Sample Diluent NS (ab193972)	1 x 50ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

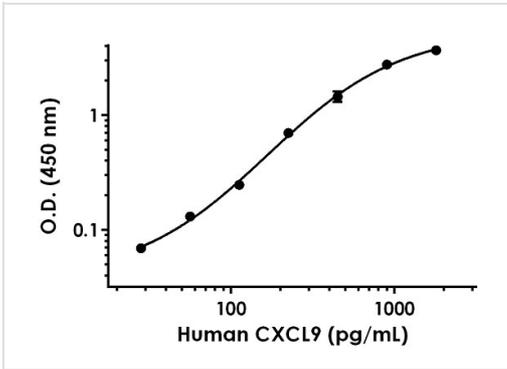
<b>Function</b>	Cytokine that affects the growth, movement, or activation state of cells that participate in immune and inflammatory response. Chemotactic for activated T-cells. Binds to CXCR3.
<b>Sequence similarities</b>	Belongs to the intercrine alpha (chemokine CxC) family.
<b>Cellular localization</b>	Secreted.

## Images



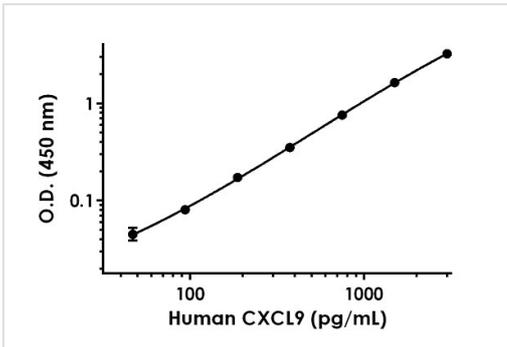
Other - Human CXCL9 ELISA Kit (ab219047)

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.



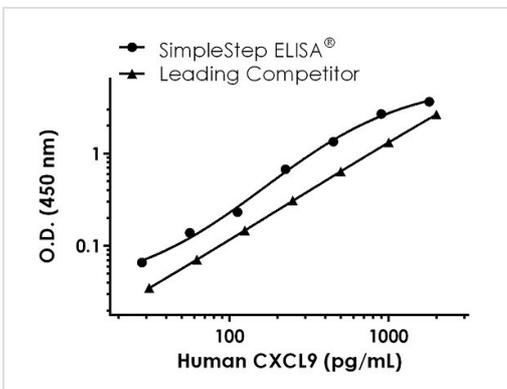
Example of human CXCL9 standard curve in Sample Diluent NS.

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



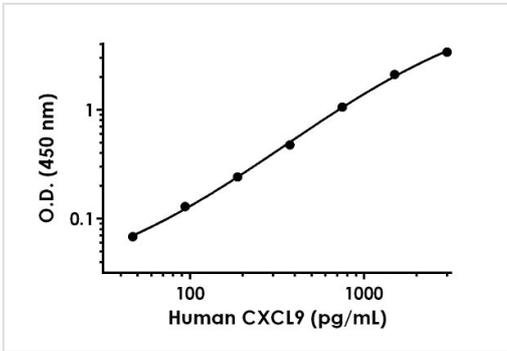
Example of human CXCL9 standard curve in 1X Cell Extraction Buffer PTR.

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



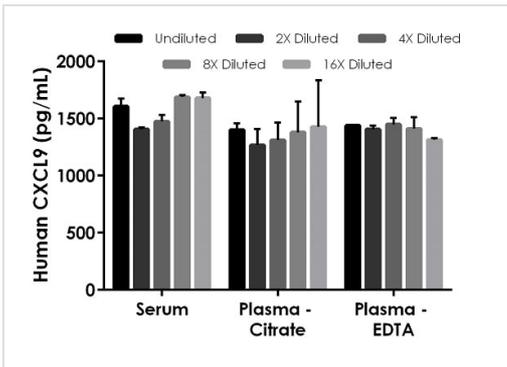
Human CXCL9 standard curve comparison data

Standard curve comparison between human CXCL9 SimpleStep ELISA<sup>®</sup> kit and traditional ELISA kit from leading competitor. SimpleStep ELISA kit shows comparable sensitivity.

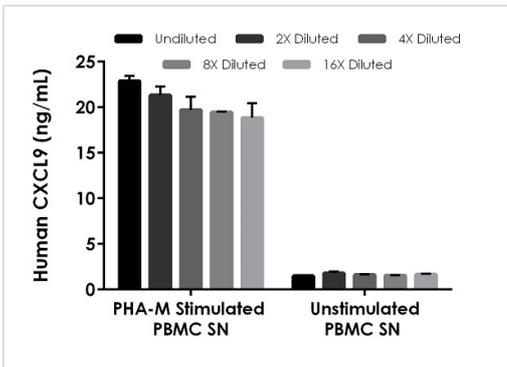


Example of human CXCL9 standard curve in Sample Diluent 10BP.

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

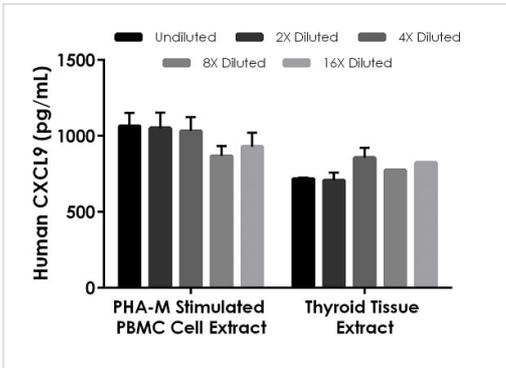


Interpolated concentrations of recombinant human CXCL9 protein spiked into human serum and plasma samples.



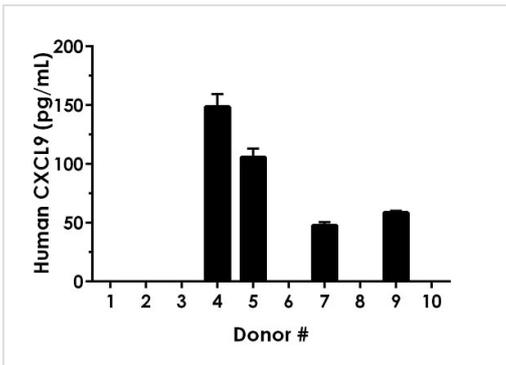
Interpolated concentrations of native CXCL9 in PHA-M stimulated and unstimulated human PBMC cell culture supernatant (2 days) samples.

The concentrations of CXCL9 were measured in duplicates, interpolated from the MIG standard curves and corrected for sample dilution. Undiluted samples are as follows: PHA-M stimulated PBMC supernatant 2.5% and unstimulated PBMC supernatant 100% (neat). The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean CXCL9 concentration was determined to be 20.4 ng/mL in neat PHA-M stimulated PBMC supernatant and 1.62 ng/mL in neat unstimulated PBMC supernatant.



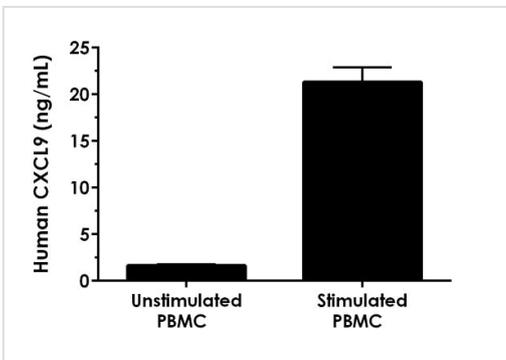
Interpolated concentrations of native CXCL9 in PHA-M stimulated human PBMC cell extract based on a 200 µg/mL extract load and human thyroid tissue extract based on a 500 µg/mL extract load.

The concentrations of CXCL9 were measured in duplicate and interpolated from the MIG standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean CXCL9 concentration was determined to be 993.9 pg/mL in PHA-M stimulated PBMC cell extract and 824.9 pg/mL in thyroid tissue extract.



Serum from ten individual healthy female human donors was measured in duplicate.

Interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean of detectable CXCL9 concentration was determined to be 90.2 pg/mL with a range of 47.8 – 149 pg/mL. Detectable concentrations are defined as concentration above the lowest standard concentration.



Comparison of CXCL9 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 2 days. The concentrations of CXCL9 were measured in three different dilutions of the supernatant samples in duplicates and interpolated from the MIG standard curve. The interpolated values are plotted (mean +/- SD, n=2). The mean MIG concentration was determined to be 20.4 pg/mL in PHA-M stimulated PBMC cell supernatant, 1.6 pg/mL in unstimulated supernatants and undetectable in media (not shown).

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Sandwich ELISA - Human CXCL9 ELISA Kit  
(ab219047)

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

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