

Human IP-10 ELISA Kit ab173194

SimpleStep ELISA

★★★★★ [1 Abreviews](#) [11 References](#) [6 Images](#)

Overview

Product name Human IP-10 ELISA Kit

Detection method Colorimetric

Precision	Intra-assay			
	Sample	n	Mean	SD
	PBMC media	9		5.1%

	Inter-assay			
	Sample	n	Mean	SD
	PBMC media	3		11.1%

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

Assay type Sandwich (quantitative)

Sensitivity 2.6 pg/ml

Range 12.5 pg/ml - 800 pg/ml

Recovery	Sample specific recovery	
	Sample type	Average %
	Serum	103
	Cell culture media	96
	Hep Plasma	86
	EDTA Plasma	101
	Cit plasma	96

Range
102% - 105%
95% - 98%
82% - 88%
99% - 103%
93% - 98%

Assay time 1h 30m

Assay duration One step assay

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

Human IP-10 (CXCL10) ELISA (ab173194) kit is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of IP-10 protein in human serum and plasma samples. It uses our proprietary SimpleStep ELISA® technology. Quantitate human IP-10 with 1.4 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

C-X-C motif chemokine 10 (CXCL10 or IP-10) is a small 10.8kD protein that is secreted by several cell types in response to interferon-gamma (IFNγ). These cell types include monocytes, endothelial cells and fibroblasts. Upon secretion, CXCL10 is cleaved into an 8.7kD biologically active protein to function in chemotaxis for T-cells, NK cells, monocytes/macrophages and dendritic cells. In addition, CXCL10 has antitumor activity through the inhibition of bone marrow colony formation and angiogenesis. CXCL10 elicits its effects by binding to the cell surface chemokine receptor 3 (CXCR3).

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

Microplate

Properties**Storage instructions**

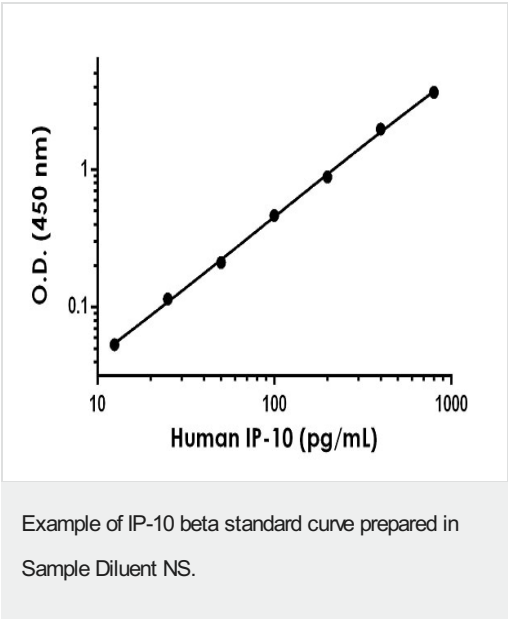
Store at +4°C. Please refer to protocols.

Components	1 x 96 tests	1 x 96 tests
10X Human IP-10 Capture Antibody	1 x 600µl	1 x 600µl
10X Human IP-10 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
Human IP-10 Lyophilized Recombinant Protein	2 vials	2 vials

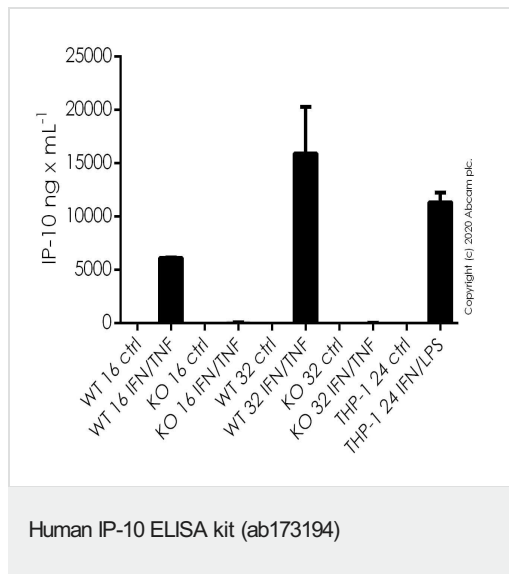
Components	1 x 96 tests	1 x 96 tests
Plate Seals	1 unit	1 unit
Sample Diluent NS (ab193972)	1 x 50ml	1 x 50ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit	1 unit
Stop Solution	1 x 12ml	1 x 12ml
TMB Development Solution	1 x 12ml	1 x 12ml

Function	Chemotactic for monocytes and T-lymphocytes. Binds to CXCR3.
Sequence similarities	Belongs to the intercrine alpha (chemokine CxC) family.
Post-translational modifications	CXCL10(1-73) is produced by proteolytic cleavage after secretion from keratinocytes.
Cellular localization	Secreted.

Images



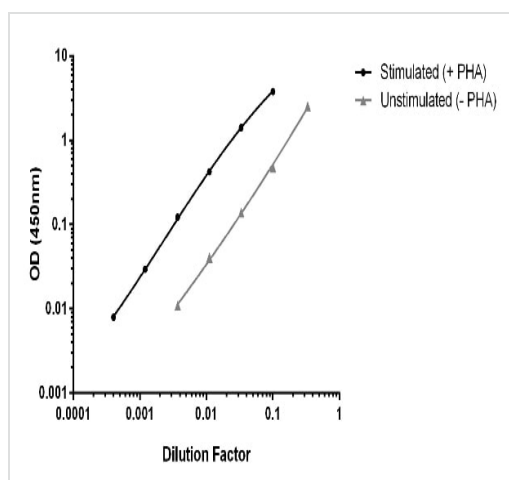
Background-subtracted data values (mean +/- SD) are graphed.



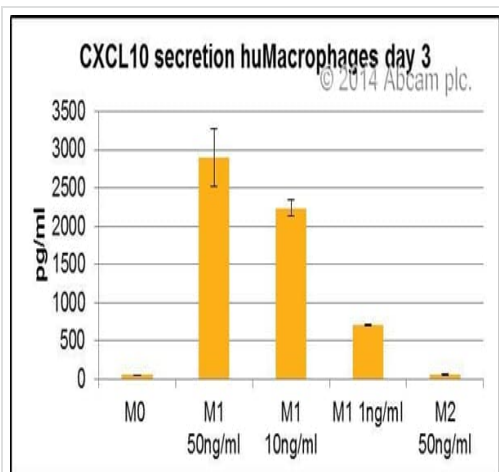
Wild-type A549 control cells or IP-10 knockout A549 cells ([ab266969](#)), grown to 40% confluency, were stimulated with Recombinant Human Interferon gamma protein ([ab259377](#)) at 100 ng/ml and Recombinant human TNF alpha protein ([ab259410](#)) at 10 ng/ml or vehicle control for 16 or 32 hours.

THP-1 cells, grown to 40% confluency, were stimulated with Recombinant Human Interferon gamma protein ([ab259377](#)) at 200 ng/ml and LPS at 50 ng/mL or vehicle control for 24 hours.

The concentrations of IP-10 (CXCL10) in cell culture supernatants were measured in duplicate and interpolated from the IP-10 standard curves. IP-10 from vehicle control samples were measured in undiluted supernatants and the treated samples were diluted 200 times. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2).



Titration of PBMC conditioned media (+/- PHA) within the working range of the assay. Background subtracted data from triplicate measurements are plotted.

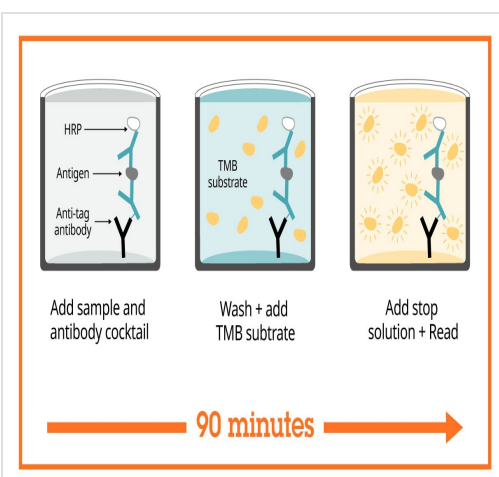


Sandwich ELISA _ IP-10 (CXCL10) Human

SimpleStep ELISA™ Kit (ab173194)

This image is courtesy of an anonymous Abreview

Data shows specific secretion of IP-10 (CXCL10) by human macrophages differentiated in culture for 3 days in a dose response to M1 (MCSF + IFN γ).



Sandwich ELISA - Human IP-10 ELISA Kit

(ab173194)

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.

**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

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

Sandwich ELISA - Human IP-10 ELISA Kit
(ab173194)

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