

Product datasheet

Human Pentraxin 3 / PTX3 ELISA Kit ab214570

Recombinant SimpleStep ELISA[®]

★★★★★ [1 Abreviews](#) [6 References](#) [8 Images](#)

Overview

Product name Human Pentraxin 3 / PTX3 ELISA Kit

Detection method Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%
Plasma-EDTA	5			6.1%

Inter-assay

Sample	n	Mean	SD	CV%
Plasma-EDTA	3			3.7%

Sample type

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

Assay type

Sandwich (quantitative)

Sensitivity

3.4 pg/ml

Range

15.6 pg/ml - 1000 pg/ml

Recovery

Sample specific recovery

Sample type	Average %	Range
Cell culture supernatant	100	93% - 105%
Saliva	92	88% - 95%
Serum	104	100% - 108%
Cell culture extracts	100	93% - 103%
Hep Plasma	99	98% - 100%
EDTA Plasma	82	80% - 85%

Sample type	Average %	Range
Cit plasma	101	94% - 106%

Assay time

1h 30m

Assay duration

One step assay

Species reactivity

Reacts with: Human

Does not react with: Cow

Product overview

Human Pentraxin 3 / PTX3 ELISA Kit (ab214570) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of Pentraxin 3 / PTX3 protein in cell culture extracts, cell culture supernatant, cit plasma, edta plasma, hep plasma, serum, tissue extracts, and saliva. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human Pentraxin 3 / PTX3 with 3.4 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

Pentraxin 3 (also known as pentraxin-related protein PTX3 or TSG-14) is a secreted protein with a role in innate immune response. It is secreted by many cell types during infectious situations. The standard protein provided in this kit corresponds to the C-terminal Pentaxin domain of Pentraxin 3.

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

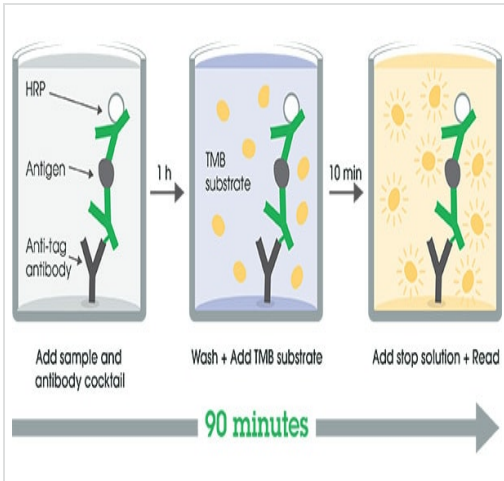
Storage instructions

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

Components	1 x 96 tests
10X Human Pentraxin 3 Capture Antibody	1 x 600µl
10X Human Pentraxin 3 Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
50X Cell Extraction Enhancer Solution (ab193971)	1 x 1ml
5X Cell Extraction Buffer PTR (ab193970)	1 x 10ml
Antibody Diluent 5BI	1 x 6ml
Human Pentraxin 3 Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
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

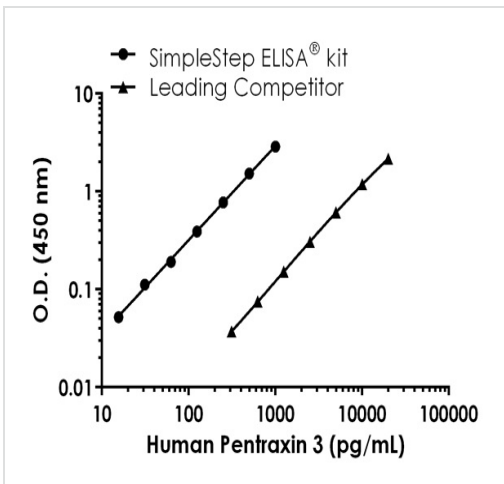
Function	Plays a role in the regulation of innate resistance to pathogens, inflammatory reactions, possibly clearance of self-components and female fertility.
Sequence similarities	Contains 1 pentaxin domain.
Post-translational modifications	Glycosylated.
Cellular localization	Secreted.

Images



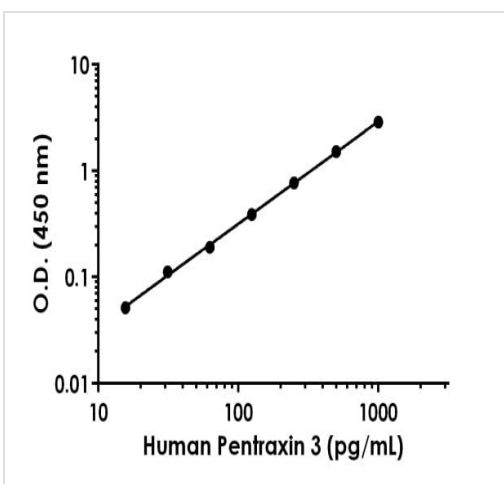
Other - Human Pentraxin 3 / PTX3 ELISA Kit
(ab214570)

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.



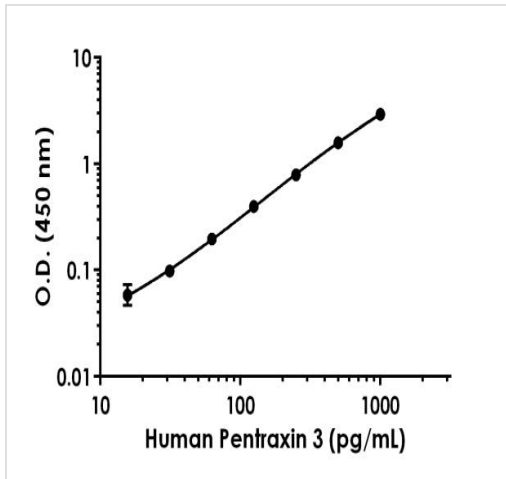
Human Pentraxin 3 standard curve comparison data.

Standard curve comparison between human Pentraxin 3 SimpleStep ELISA[®] kit and traditional ELISA kit from leading competitor. SimpleStep ELISA kit shows a 33-fold increase in sensitivity.



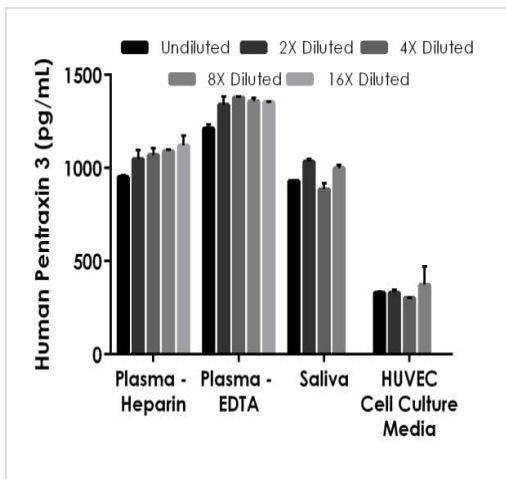
Example of human Pentraxin 3 standard curve in Sample Diluent NS.

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



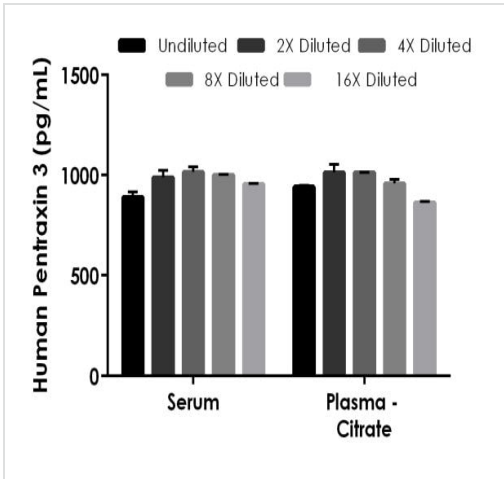
Example of human Pentraxin 3 standard curve in 1X Cell Extraction Buffer PTR.

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



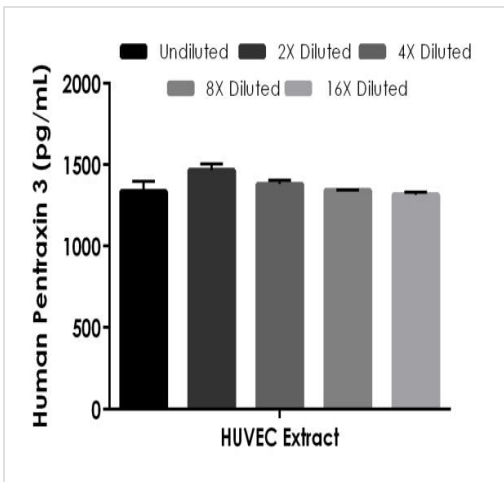
Interpolated concentrations of native Pentraxin 3 in human plasma, saliva and cell culture supernatant samples.

The concentrations of Pentraxin 3 were measured in duplicates, interpolated from the Pentraxin 3 standard curves and corrected for sample dilution. Undiluted samples are as follows: Plasma (heparin) 25%, plasma (EDTA) 25%, saliva 10%, and HUVEC cell culture supernatant 100%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean Pentraxin 3 concentration was determined to be 1,056 pg/mL in plasma (heparin), 1,329 og/mL in plasma (EDTA), 962 pg/mL in saliva and 334 pg/mL in HUVEC cell culture supernatant.



Interpolated concentrations of spiked Pentraxin 3 in human serum and plasma samples.

The concentrations of Pentraxin 3 were measured in duplicates, interpolated from the Pentraxin 3 standard curves and corrected for sample dilution. Undiluted samples are as follows: Serum 50%, and Plasma (Citrate) 25%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2).



Interpolated concentrations of native Pentraxin 3 in human HUVEC Extract sample based on a 200 µg/mL extract load.

The concentrations of Pentraxin 3 were measured in duplicate and interpolated from the Pentraxin 3 standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean Pentraxin 3 concentration was determined to be 1,368 pg/mL.

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

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

Sandwich ELISA - Human Pentraxin 3 / PTX3 ELISA Kit (ab214570)

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