abcam

Product datasheet

Human Serpin A12 ELISA Kit ab239430

Recombinant SimpleStep ELISA

8 Images

Overview

Product name

Human Serpin A12 ELISA Kit

Detection method

Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%	
serum	8			2.1%	

Inter-assay

Sample	n	Mean	SD	CV%
serum	3			4.3%

Sample type

Saliva, Serum, Hep Plasma, EDTA Plasma, Cit plasma

Assay type

Sandwich (quantitative)

Sensitivity

3.12 pg/ml

Range

19.53 pg/ml - 1250 pg/ml

Recovery

Sample specific recovery

Sample type	Average %	Range
Saliva	97	87% - 105%
Serum	107	103% - 110%
Cell culture media	97	96% - 100%
Hep Plasma	100	97% - 105%
EDTA Plasma	99	95% - 102%
Cit plasma	89	81% - 102%

Assay time 1h 30m

Assay duration One step assay

Species reactivity Reacts with: Human

Product overview Human Serpin A12 ELISA Kit (ab239430) is a single-wash 90 min sandwich ELISA designed for

the quantitative measurement of Serpin A12 protein in cit plasma, edta plasma, hep plasma, saliva, and serum. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human

Serpin A12 with 3.12 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 (<u>ab203359</u>) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.

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

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Properties

Storage instructions

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

Components	1 x 96 tests
10X Human Serpin A12 Capture Antibody	1 x 600µl
10X Human Serpin A12 Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent 4BI	1 x 6ml
Human Serpin A12 Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent NS (ab193972)	1 x 12ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

Function May modulates insulin action conceivably only in the presence of its yet undefined target

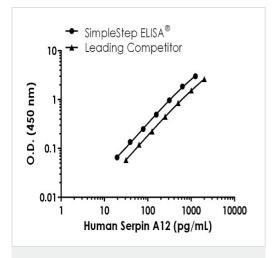
proteases in white adipose tissues.

Tissue specificity Expressed in visceral adipose tissues.

Sequence similarities Belongs to the serpin family.

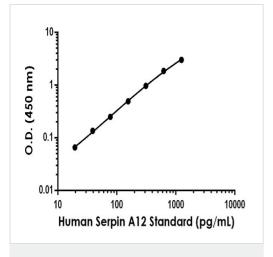
Cellular localization Secreted.

Images



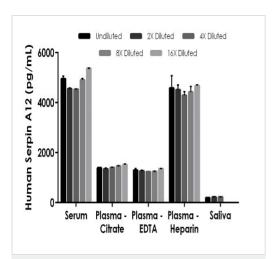
Human Serpin A12 gamma Standard Curve Comparison

Standard Curve comparison between Human Serpin A12 SimpleStep ELISA kit and traditional ELISA kit from leading competitor. SimpleStep ELISA kit shows increased sensitivity.



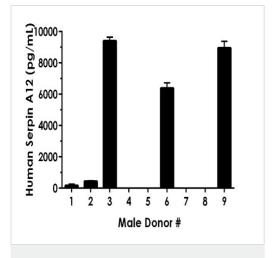
Example of human Serpin A12 standard curve in Sample Diluent NS.

The Serpin A12 standard curve was prepared as described in Section 10. Raw data values are shown in the table. Background-subtracted data values (mean +/- SD) are graphed.



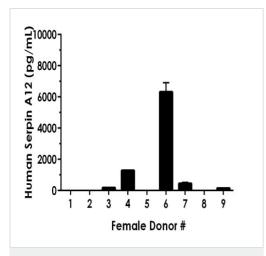
Interpolated concentrations of native Serpin A12 in human serum, plasma and saliva samples.

The concentrations of Serpin A12 were measured in duplicates, interpolated from the Serpin A12 standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 15%, plasma (citrate) 50%, plasma (EDTA) 100%, plasma (heparin) 25% and saliva 50%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean Serpin A12 concentration was determined to be 4862.24 pg/mL in serum, 1422.93 pg/mL in plasma (citrate), 1275.97 pg/mL in plasma (EDTA), 4493.91 pg/mL in plasma (heparin), and 208.10 pg/mL in saliva.



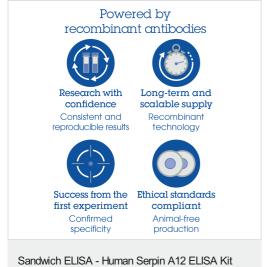
Serum from ten individual healthy human male donors was measured in duplicate.

Interpolated dilution factor corrected values are plotted (mean +/-SD, n=2). The mean Serpin A12 concentration was determined to be 5068.08 pg/mL with a range of undetectable - 9406.87 pg/mL.



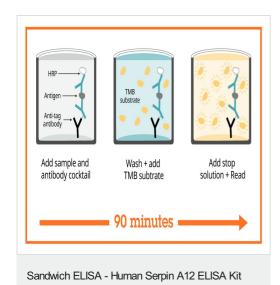
Interpolated dilution factor corrected values are plotted (mean +/-SD, n=2). The mean Serpin A12 concentration was determined to be 1672.82 pg/mL with a range of undetectable - 6317.42 pg/mL.

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



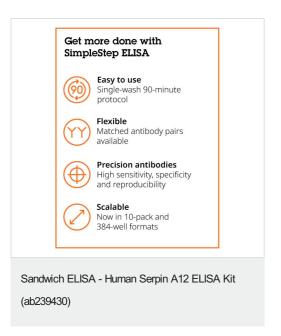
To learn more about the advantages of recombinant antibodies see **here**.

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SimpleStep ELISA technology allows the formation of the antibodyantigen 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.



To learn more about the advantages of SimpleStep ELISA[®] kits see <u>here</u>.

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