

Human PAPP A ELISA Kit ab235647

Recombinant SimpleStep ELISA

[1 References](#) [7 Images](#)

Overview

Product name Human PAPP A ELISA Kit

Detection method Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%
Serum	3			8.6%

Inter-assay

Sample	n	Mean	SD	CV%
Serum	8			2.1%

Sample type Serum, Tissue Extracts, EDTA Plasma, Cit plasma

Assay type Sandwich (quantitative)

Sensitivity 58 pg/ml

Range 187.5 pg/ml - 16000 pg/ml

Recovery

Sample specific recovery

Sample type	Average %	Range
Serum	113	106% - 126%
Tissue Extracts	86	79% - 94%
Hep Plasma	96	95% - 96%
EDTA Plasma	98	94% - 103%
Cit plasma	90	82% - 103%

Assay time 1h 30m

Assay duration One step assay

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

Human PAPP A ELISA Kit (ab235647) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of PAPP A protein in cit plasma, edta plasma, serum, and tissue extracts. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human PAPP A with 8.89 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

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**

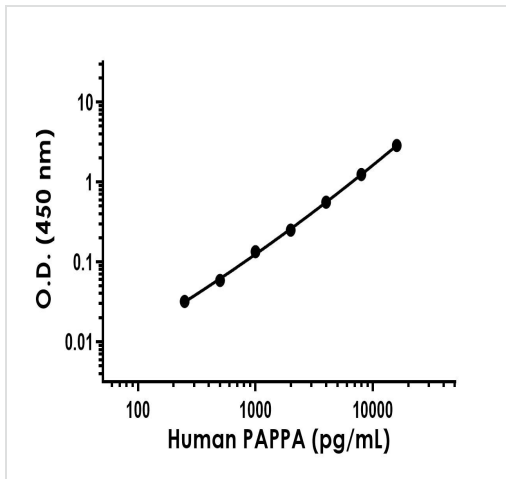
Store at +4°C. Please refer to protocols.

Components	1 x 96 tests
10X Human PAPP A Capture Antibody	1 x 600µl
10X Human PAPP A 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 CPR2	1 x 6ml
Human PAPP A Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit

Components	1 x 96 tests
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

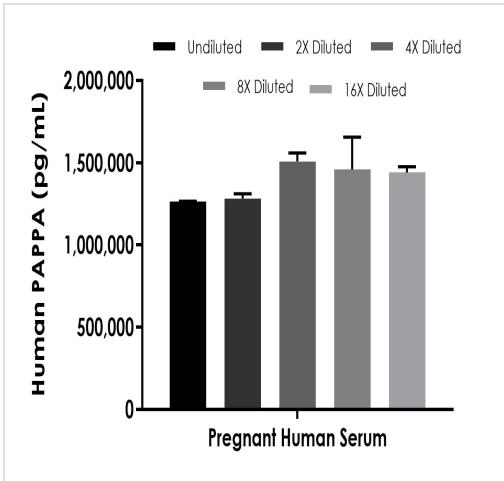
Function	Metalloproteinase which specifically cleaves IGFBP-4 and IGFBP-5, resulting in release of bound IGF. Cleavage of IGFBP-4 is dramatically enhanced by the presence of IGF, whereas cleavage of IGFBP-5 is slightly inhibited by the presence of IGF.
Tissue specificity	High levels in placenta and pregnancy serum. In placenta, expressed in X cells in septa and anchoring villi, and in syncytiotrophoblasts in the chorionic villi. Lower levels are found in a variety of other tissues including kidney, myometrium, endometrium, ovaries, breast, prostate, bone marrow, colon, fibroblasts and osteoblasts.
Sequence similarities	Belongs to the peptidase M43B family. Contains 5 Sushi (CCP/SCR) domains.
Developmental stage	Present in serum and placenta during pregnancy; levels increase throughout pregnancy.
Post-translational modifications	There appear to be no free sulfhydryl groups.
Cellular localization	Secreted.

Images



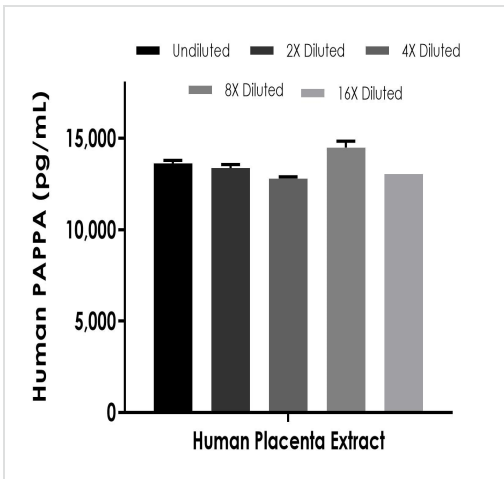
Example of human PAPP-A standard curve in 1X Cell Extraction Buffer PTR. Background-subtracted data values (mean \pm SD) are graphed.

Sandwich ELISA - Human PAPP-A ELISA Kit
(ab235647)



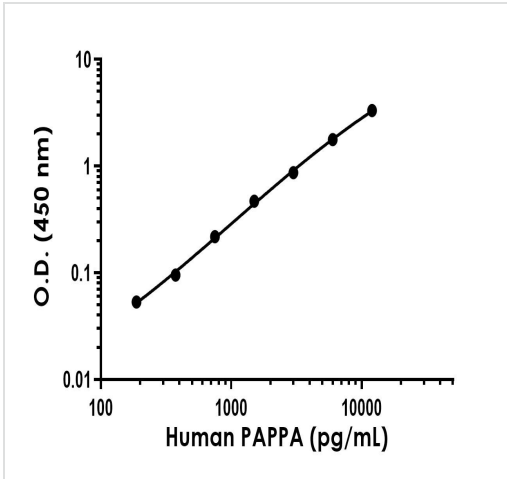
Sandwich ELISA - Human PAPP A ELISA Kit
(ab235647)

Interpolated concentrations of native PAPP A in human pregnant serum. The concentrations of PAPP A were measured in duplicates, interpolated from the PAPP A standard curves and corrected for sample dilution. Undiluted samples are as follows: pregnant serum 1:167. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean PAPP A concentration was determined to be 1,390.617 ng/mL in pregnant serum.



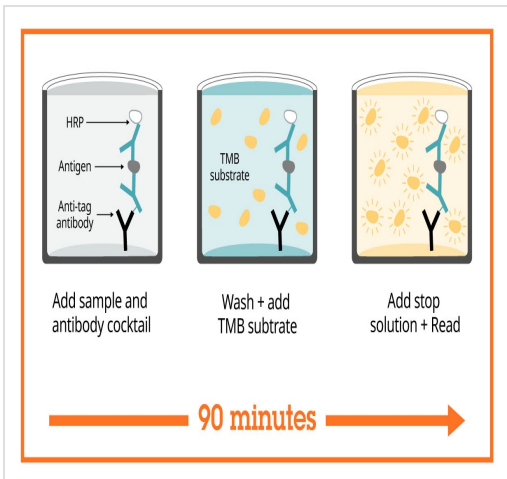
Sandwich ELISA - Human PAPP A ELISA Kit
(ab235647)

Interpolated concentrations of native PAPP A in human placenta extract based on a 300 µg/mL extract load. The concentrations of PAPP A were measured in duplicate and interpolated from the PAPP A standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean PAPP A concentration was determined to be 13,470.7 pg/mL.



Example of human PAPP A standard curve in Sample Diluent NS. Background-subtracted data values (mean +/- SD) are graphed.

Sandwich ELISA - Human PAPP A ELISA Kit (ab235647)



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.

Sandwich ELISA - Human PAPP A ELISA Kit (ab235647)

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

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

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

Sandwich ELISA - Human PAPP A ELISA Kit
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To learn more about the advantages of SimpleStep ELISA[®] kits see [here](#).

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