

Product datasheet

Human ICA 512 / PTPRN ELISA Kit ab226903

Recombinant SimpleStep ELISA

[6 Images](#)

Overview

Product name Human ICA 512 / PTPRN ELISA Kit

Detection method Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%
Cell Extract	8			2.9%

Inter-assay

Sample	n	Mean	SD	CV%
Cell Extract	3			6.6%

Sample type Cell culture extracts, Tissue, Hep Plasma, Cit plasma

Assay type Sandwich (quantitative)

Sensitivity 3.52 pg/ml

Range 31.25 pg/ml - 2000 pg/ml

Recovery

Sample specific recovery

Sample type	Average %	Range
Cell culture extracts	92	91% - 94%
Tissue	87	85% - 90%
Hep Plasma	85	82% - 87%
Cit plasma	79	76% - 82%

Assay time 1h 30m

Assay duration One step assay

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

Human ICA 512 / PTPRN ELISA Kit (ab226903) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of ICA 512 / PTPRN protein in cit plasma, hep plasma, tissue, and cell culture extracts. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human ICA 512 / PTPRN with 3.52 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)

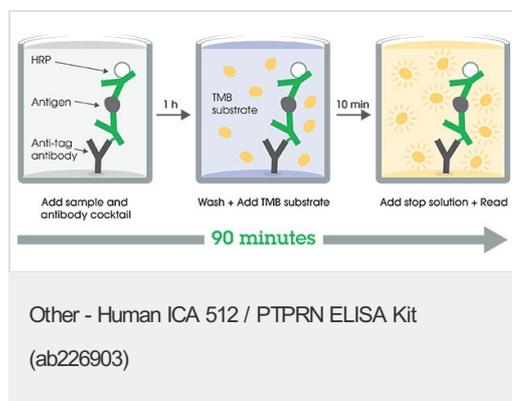
Properties**Storage instructions** Store at +4°C. Please refer to protocols.

Components	1 x 96 tests
10X 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 4BI	1 x 6ml
10X Human ICA 512 / PTPRN Capture Antibody	1 x 600µl
10X Human ICA 512 / PTPRN Detector Antibody	1 x 600µl
Human ICA 512 / PTPRN Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit

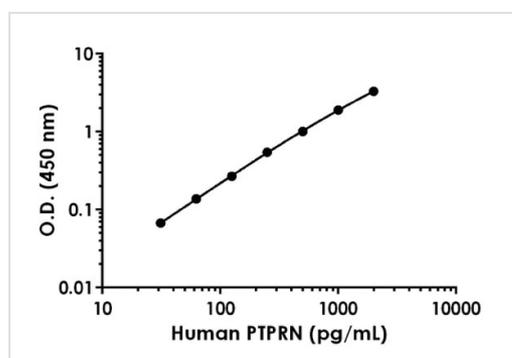
Components	1 x 96 tests
Sample Diluent NS (ab193972)	1 x 50ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

Function	Implicated in neuroendocrine secretory processes. May be involved in processes specific for neurosecretory granules, such as their biogenesis, trafficking or regulated exocytosis or may have a general role in neuroendocrine functions. Seems to lack intrinsic enzyme activity. May play a role in the regulation of secretory granules via its interaction with SNTB2.
Tissue specificity	Expression is restricted to neuroendocrine cells. Found in pancreas, brain and pituitary.
Sequence similarities	Belongs to the protein-tyrosine phosphatase family. Receptor class 8 subfamily. Contains 1 tyrosine-protein phosphatase domain.
Post-translational modifications	Appears to undergo multiple proteolytic cleavage at consecutive basic residues.
Cellular localization	Membrane. Neuroendocrine secretory granules.

Images

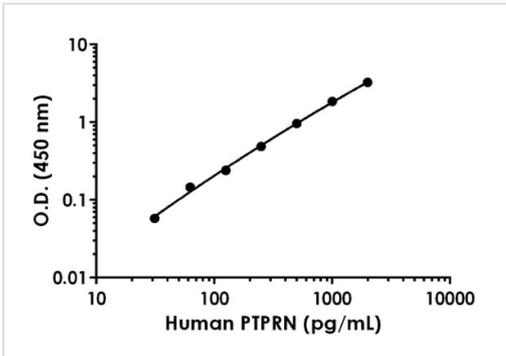


SimpleStep ELISA technology allows the formation of the antibody-antigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.



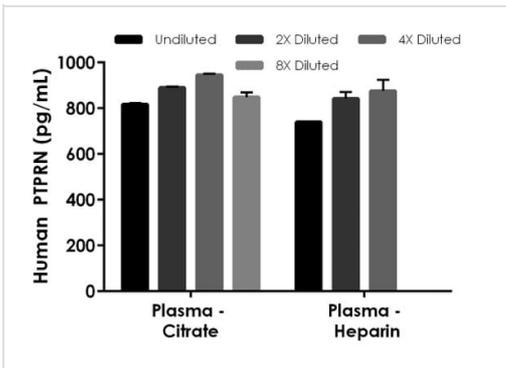
Background-subtracted data values (mean +/- SD) are graphed.

Example of Human PTPRN standard curve in Sample Diluent NS



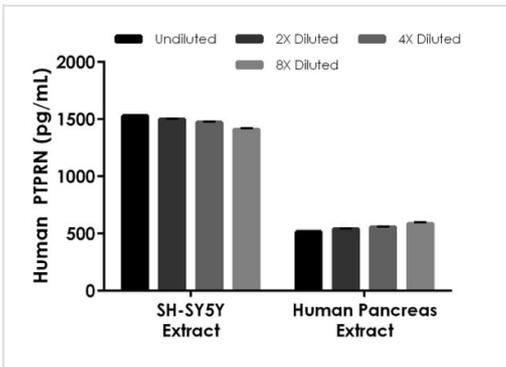
Example of Human PTPRN standard curve in Cell Extraction Buffer PTR

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



Interpolated concentrations of native PTPRN in Human plasmas

The concentrations of PTPRN were measured in duplicates, interpolated from the PTPRN standard curves and corrected for sample dilution. Undiluted samples are as follows: plasma (citrate) 25%, plasma (heparin) 25%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean PTPRN concentration was determined to be 874.85 pg/mL in plasma (citrate) and 819.33 pg/mL in plasma (heparin).



Interpolated concentrations of native PTPRN in Human SH-SY5Y cell extract and human pancreas extract based on a 500 µg/mL extract load

The concentrations of PTPRN were measured in duplicate and interpolated from the PTPRN standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean PTPRN concentration was determined to be 1478.61 pg/mL in SH-SY5Y extract and 489 pg/mL in human pancreas.

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recombinant antibodies



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Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Sandwich ELISA - Human ICA 512 / PTPRN ELISA
Kit (ab226903)

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

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