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Product datasheet

Human Serpin B2 ELISA Kit (PAI-2) ab272480

Recombinant SimpleStep ELISA

5 Images

Overview

Product name Human Serpin B2 ELISA Kit (PAI-2)

Detection method Colorimetric

Precision Intra-assay

Sample	n	Mean	SD	CV%
Protein	8			2.8%

Inter-assay

Sample	n	Mean	SD	CV%
Protein	3			4.24%

Sample type Tissue Extracts, Cell Lysate

Assay type Sandwich (quantitative)

Sensitivity 110 pg/ml

312.5 pg/ml - 20000 pg/ml Range

Recovery Sample specific recovery

Sample type	Average %	Range
Tissue Extracts	84	80% - 90%
Cell Lysate	85	85% - 85%

Assay time 1h 30m

Assay duration One step assay

Species reactivity Reacts with: Human

Product overview Human Serpin B2 ELISA kit (ab272480) is a single-wash 90 min sandwich ELISA designed for

> the quantitative measurement of Human Serpin B2 protein in cell and tissue extracts. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human Serpin B2 with 110 pg/mL

sensitivity.

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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.

Serpin B2, also known as plasminogen activator inhibitor-2 (PAI-2), is a protein that belongs to the serpin family of protease inhibitors. Serpin B2 exists in two forms, a 47kDa immature form and glycolsylated 60 kDa mature. The majority of clade B (ov-serpins) of the serpin family inhibit serine and/or papain-like cysteine proteinases and protect cells from exogenous and endogenous proteinase-mediated injury. The monocyte derived PAI-2 is distinct from the endothelial cell-derived PAI-1. Serpin B2 shares 76% and 73% sequence homology with mouse and rat, respectively.

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.

Pre-coated microplate (12 x 8 well strips)

Platform

Properties

Storage instructions

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

Components	1 x 96 tests
10X Human Serpin B2 (PAI-2) Capture Antibody	1 x 600µl
10X Human Serpin B2 (PAI-2) 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

Components	1 x 96 tests
Human Serpin B2 (PAI-2) 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 Inhibits urokinase-type plasminogen activator. The monocyte derived PAI-2 is distinct from the

endothelial cell-derived PAI-1.

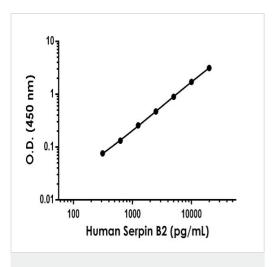
Sequence similaritiesBelongs to the serpin family. Ov-serpin subfamily.

Post-translational The signal sequence is not cleaved.

modifications

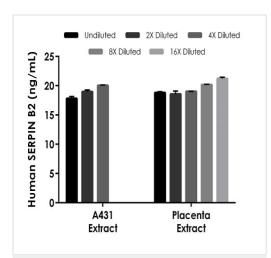
Cellular localization Cytoplasm. Secreted > extracellular space.

Images



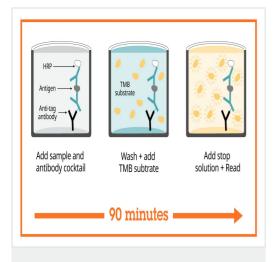
Example of human Serpin B2 standard curve in 1X Cell Extraction Buffer PTR.

The Serpin B2 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 B2 in human A431 cells

based on a 200 μ g/mL extract load and placenta tissue extract based on a 30 μ g/mL extract load. The concentrations of Serpin B2 were measured in duplicate and interpolated from the Serpin B2 standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean Serpin B2 concentration was determined to be 18.93 ng/mL in A431 extract and 18.79 ng/mL in placenta extract.



Sandwich ELISA - Human Serpin B2 ELISA Kit (PAI-2) (ab272480)

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 recombinant antibodies see **here**.



Kit (PAI-2) (ab272480)

(PAI-2) (ab272480)

To learn more about the advantages of SimpleStep $\mathsf{ELISA}^{\$}$ kits see **here**.



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