

Product datasheet

Human VE Cadherin ELISA Kit ab210968

Recombinant SimpleStep ELISA

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Overview

Product name Human VE Cadherin ELISA Kit

Detection method Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%
EDTA plasma	5			5.3%

Inter-assay

Sample	n	Mean	SD	CV%
EDTA plasma	3			10.1%

Sample type Cell culture supernatant, Urine, Serum, Plasma

Assay type Sandwich (quantitative)

Sensitivity 331 pg/ml

Range 0.63 ng/ml - 40 ng/ml

Recovery

Sample specific recovery

Sample type	Average %	Range
Cell culture supernatant	119	112% - 115%
Serum	99	91% - 103%
Hep Plasma	116	110% - 121%
EDTA Plasma	99	96% - 101%
Cit plasma	94	84% - 99%

Assay time 1h 30m

Assay duration One step assay

Species reactivity**Reacts with:** Human**Does not react with:** Cow**Product overview**

Human VE Cadherin ELISA Kit (ab210968) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of VE Cadherin protein in cell culture supernatant, plasma, serum, and urine. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human VE Cadherin with 331 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

VE-Cadherin (also known as Cadherin 5 or CD144) is a calcium dependent cell-cell adhesion glycoprotein. VE-Cadherin is a member of the cadherin superfamily, which interact with themselves in connecting cells. VE-Cadherin is expressed in endothelial cells and has role establishing and maintaining endothelial polarity and intercellular junctions.

Platform

Pre-coated microplate (12 x 8 well strips)

Properties**Storage instructions**

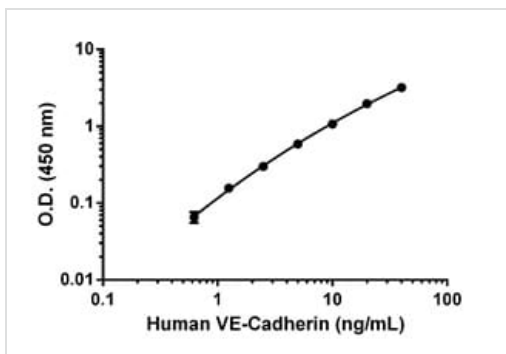
Store at +4°C. Please refer to protocols.

Components	1 x 96 tests
10X Human VE-Cadherin Capture Antibody	1 x 600µl
10X Human VE-Cadherin Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent CPI - HAMA Blocker (ab193969)	1 x 6ml
Human VE-Cadherin 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

Components	1 x 96 tests
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

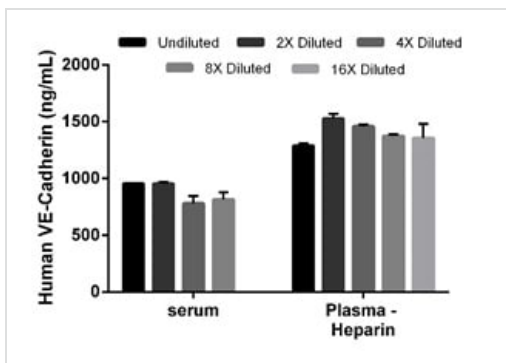
Function	Cadherins are calcium dependent cell adhesion proteins. They preferentially interact with themselves in a homophilic manner in connecting cells; cadherins may thus contribute to the sorting of heterogeneous cell types. This cadherin may play a important role in endothelial cell biology through control of the cohesion and organization of the intercellular junctions. It associates with alpha-catenin forming a link to the cytoskeleton.
Tissue specificity	Endothelial tissues and brain.
Sequence similarities	Contains 5 cadherin domains.
Post-translational modifications	Phosphorylated on tyrosine residues by KDR/VEGFR-2. Dephosphorylated by PTPRB.
Cellular localization	Cell junction. Cell membrane. Found at cell-cell boundaries and probably at cell-matrix boundaries.

Images



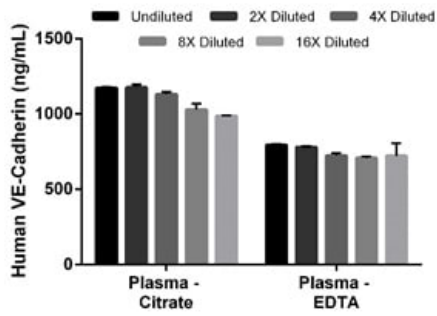
Example of Human VE-Cadherin standard curve.

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



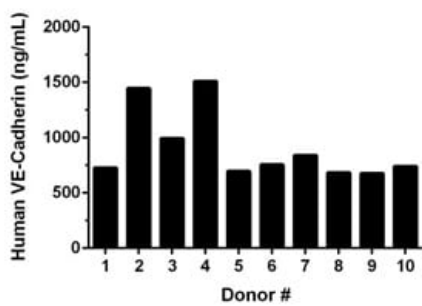
Interpolated concentrations of native VE-Cadherin in human serum, and plasma samples.

The concentrations of VE-Cadherin were measured in duplicates, interpolated from the VE-Cadherin standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 1:100 and plasma (heparin) 1:67. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean VE-Cadherin concentration was determined to be 919 ng/mL in serum and 1,400 ng/mL in plasma (heparin).



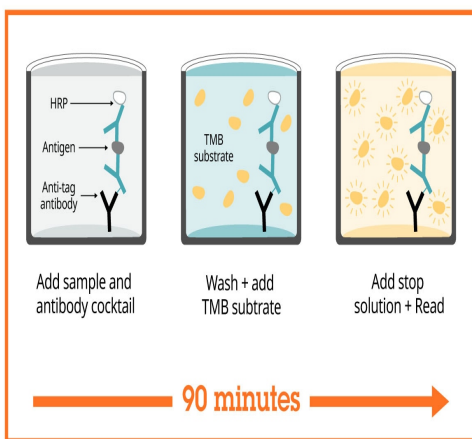
Interpolated concentrations of native VE-Cadherin in human plasma samples.

The concentrations of VE-Cadherin were measured in duplicates, interpolated from the VE-Cadherin standard curves and corrected for sample dilution. Undiluted samples are as follows: plasma (citrate) 1:100 and plasma (EDTA) 1:67. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean VE-Cadherin concentration was determined to be 1091 ng/mL in plasma (citrate) and 809 ng/mL in plasma (EDTA).



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

Interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean VE-Cadherin concentration was determined to be 908 ng/mL with a range of 628 – 1,527 ng/mL



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 VE Cadherin ELISA Kit (ab210968)

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

Sandwich ELISA - Human VE Cadherin ELISA Kit
(ab210968)

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 VE Cadherin ELISA Kit
(ab210968)

To learn more about the advantages of SimpleStep ELISA[®] kits see [here](#).

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