

Human ACE2 ELISA Kit ab235649

リコンビナント SimpleStep ELISA

★★★★★ 1 Abreviews 16 References 画像数 5

製品の概要

製品名	Human ACE2 ELISA Kit
検出方法	Colorimetric
再現性	Intra-Assay (同時再現性)

サンプル	N	平均値	SD	CV%
extract	8			2.3%

サンプル	N	平均値	SD	CV%
extract	3			3.2%

サンプルの種類	Urine, Serum, Tissue Extracts, Cell culture media, Hep Plasma, EDTA Plasma, Cit plasma
アッセイタイプ	Sandwich (quantitative)
検出感度	1052 pg/ml
検出範囲	3.98 ng/ml - 255 ng/ml
添加回収試験	特定サンプルでの回収試験

サンプルの種類	平均 %	測定範囲
Urine	88	85% - 89%
Serum	99	% - %
Tissue Extracts	104	100% - 108%
Cell culture media	112	110% - 116%
Hep Plasma	82	81% - 84%
EDTA Plasma	91	90% - 92%

サンプルの種類	平均 %	測定範囲
Cit plasma	99	98% - 100%

全工程の試験時間

1h 30m

ステップ

One step assay

種交差性

交差種: Human

製品の概要

Human ACE2 ELISA Kit (ab235649) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of native ACE2 protein in tissue extracts and urine. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human ACE2 with 1052 pg/ml sensitivity.

Note: Plasma, serum, and cell culture media samples were validated with spiked recombinant ACE2. Neat serum from ten individual healthy human female/male donors was measured in duplicate and all values were below the detectable range of the assay.

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.

特記事項

ACE2 is a key enzyme in the renin-angiotensin system which regulates blood pressure. Specifically, ACE2 cleaves the terminal nonapeptide from angiotensin I or the terminal septapeptide from angiotensin II to create angiotensin[1-9] and angiotensin[1-7], respectively. The produced peptides work to oppose the effects of angiotensin II and act as a vasodilator. This enzyme is currently under investigation as a potential target for reducing instances of heart failure.

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.

試験プラットフォーム

Pre-coated microplate (12 x 8 well strips)

製品の特長

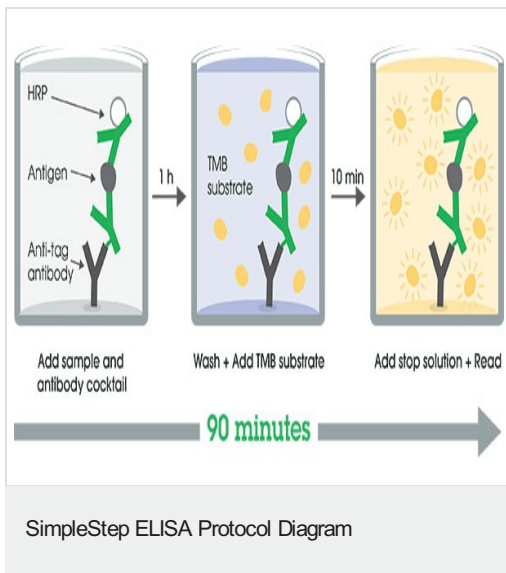
保存方法

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

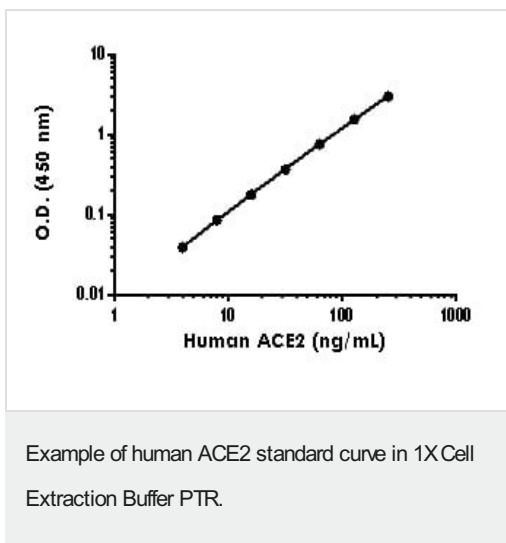
内容	1 x 96 tests
10X Human ACE2 Capture Antibody	1 x 600μl
10X Human ACE2 Detector Antibody	1 x 600μl
10X Wash Buffer PT (ab206977)	1 x 20ml
50X Cell Extraction Enhancer Solution (ab193971)	1 x 1ml
5X Cell Extraction Buffer PTR (ab193970)	1 x 10ml
Antibody Diluent 4BI	1 x 6ml
Human ACE2 Lyophilized Recombinant 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

機能	Carboxypeptidase which converts angiotensin I to angiotensin 1-9, a peptide of unknown function, and angiotensin II to angiotensin 1-7, a vasodilator. Also able to hydrolyze apelin-13 and dynorphin-13 with high efficiency. May be an important regulator of heart function. In case of human coronaviruses SARS and HCoV-NL63 infections, serve as functional receptor for the spike glycoprotein of both coronaviruses.
組織特異性	Expressed in endothelial cells from small and large arteries, and in arterial smooth muscle cells. Expressed in lung alveolar epithelial cells, enterocytes of the small intestine, Leydig cells and Sertoli cells (at protein level). Expressed in heart, kidney, testis, and gastrointestinal system.
配列類似性	Belongs to the peptidase M2 family.
翻訳後修飾	N-glycosylation on Asn-90 may limit SARS infectivity.
細胞内局在	Secreted and Cell membrane.

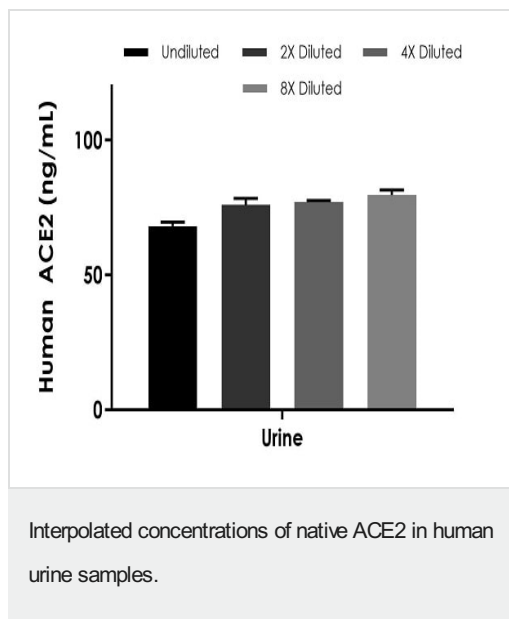
画像



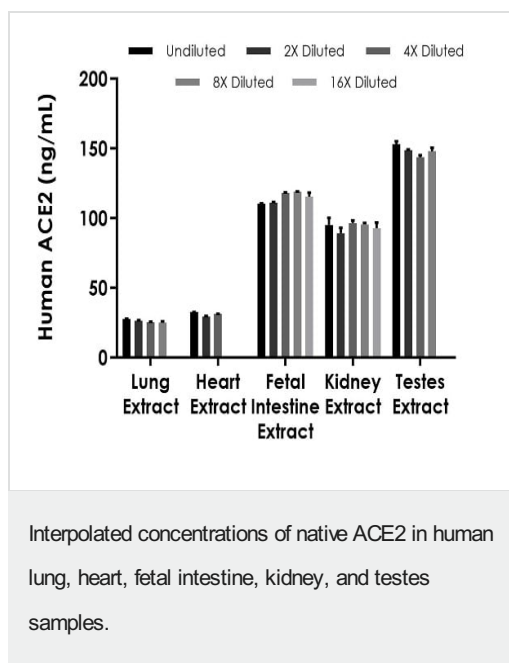
SimpleStep ELISA technology allows the formation of the antibody-antigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.



Background-subtracted data values (mean \pm SD) are graphed.



The concentrations of ACE2 were measured in duplicates, interpolated from the ACE2 standard curves and corrected for sample dilution. Undiluted samples are as follows: urine 50%. The interpolated dilution factor corrected values are plotted (mean \pm SD, $n=2$). The mean ACE2 concentration was determined to be 75.24 ng/mL in urine.



The concentrations of ACE2 were measured in duplicate and interpolated from the ACE2 standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean \pm SD, $n=2$). The mean ACE2 concentration was determined to be 26 ng/mL in lung extract, 31 ng/mL in heart extract, 115 ng/mL in fetal intestine, 94 ng/mL in kidney, and 146 ng/mL in testes extract.

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 ACE2 ELISA Kit
(ab235649)

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

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