

Human C1 inhibitor ELISA Kit ab224883

リコンビナント SimpleStep ELISA

画像数 6

製品の概要

製品名 Human C1 inhibitor 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%
Serum	9			1.9%

Inter-Assay (日差再現性)

サンプル	N	平均値	SD	CV%
Serum	3			9.4%

サンプルの種類 Cell culture supernatant, Serum, Hep Plasma, EDTA Plasma, Cit plasma

アッセイタイプ Sandwich (quantitative)

検出感度 10.9 pg/ml

検出範囲 31.25 pg/ml - 2000 pg/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
Cell culture supernatant	92	89% - 95%
Serum	113	111% - 114%
Hep Plasma	100	92% - 108%
EDTA Plasma	102	91% - 107%
Cit plasma	106	101% - 112%

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

非交差種: Cow

製品の概要

Human C1 inhibitor ELISA Kit (ab224883) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of C1 inhibitor protein in cell culture supernatant, cit plasma, edta plasma, hep plasma, and serum. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human C1 inhibitor with 10.9 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.

特記事項

C1 inhibitor, also known as C1 esterase inhibitor and Serpin G1, is a protease inhibitor belonging to the serpin superfamily, and is encoded by the gene SERPING1. C1 inhibitor is a 478 -amino acid containing protein, and is heavily glycosylated with an approximate 105 kDa molecular mass. The primary function of C1 inhibitor is the inhibition of the classical complement cascade to suppress spontaneous activation by forming an inactive complex with C1r and C1s proteases. In addition, C1 inhibitor also inactivates proteases of the fibrinolytic, clotting, and kinin pathways. The levels of C1 inhibitor in blood fluctuate during inflammation, and deficiencies of C1 inhibitor are associated with hereditary angioedema.

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)

製品の特性

保存方法

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

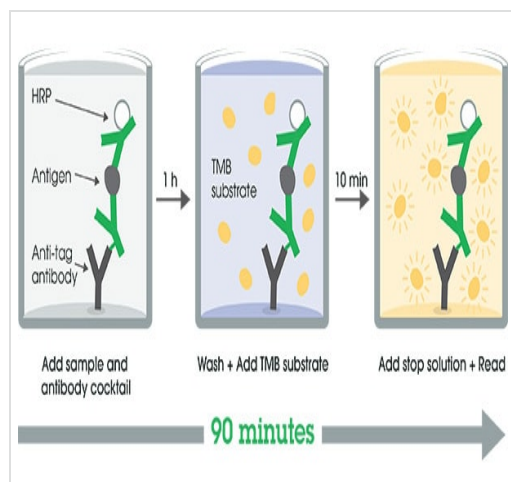
内容	1 x 96 tests
10X Wash Buffer PT (ab206977)	1 x 20ml
50X Cell Extraction Enhancer Solution (ab193971)	1 x 1ml
5X Cell Extraction Buffer PTR (ab193970)	1 x 10ml

内容	1 x 96 tests
Antibody Diluent 4BI	1 x 6ml
10X Human C1 inhibitor Capture Antibody	1 x 600µl
10X Human C1 inhibitor Detector Antibody	1 x 600µl
Human C1 inhibitor 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
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

関連性 C1 inhibitor functions as a regulator of the activation of the classical complement pathway and of the contact activation system of kinin generation and coagulation. Its primary biologically relevant target proteinases are C1r, C1s, coagulation factors XIa and XIIa, and plasma kallikrein. C1-inhibitor consists of one polypeptide chain and has a molecular mass of 104 kDa.

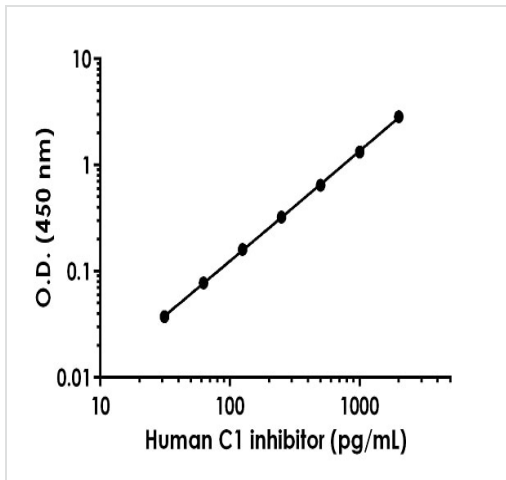
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画像



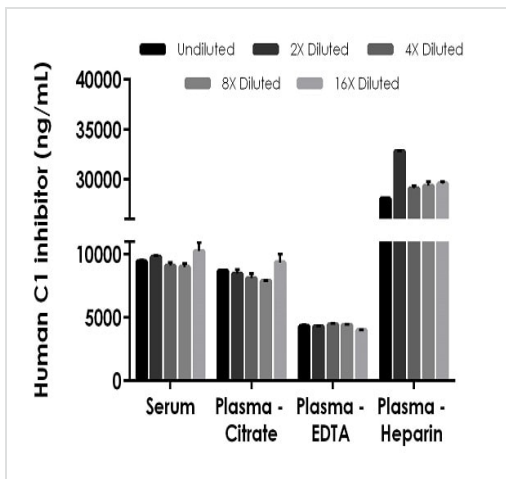
SimpleStep ELISA technology allows the formation of the antibody-antigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.

Other - Human C1 inhibitor ELISA Kit (ab224883)



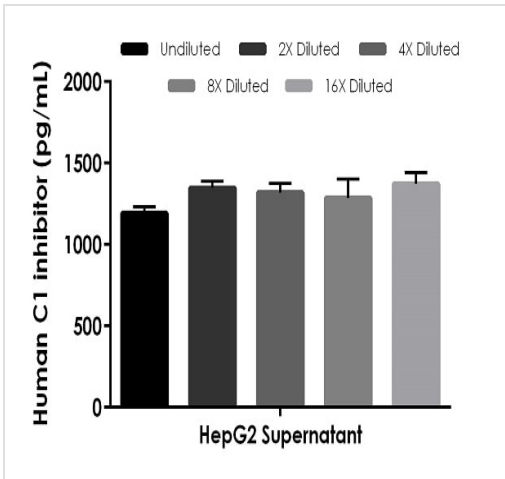
Background-subtracted data values (mean +/- SD) are graphed.

Example of human C1 inhibitor standard curve in Sample Diluent NS+1X Enhancer



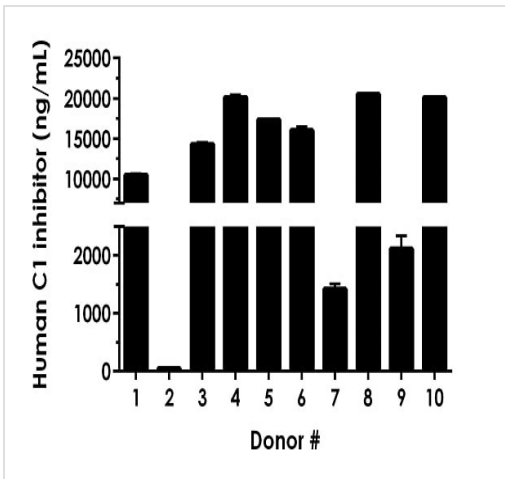
The concentrations of C1 inhibitor were measured in duplicates, interpolated from the C1 inhibitor standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 1:4000, plasma (citrate) 1:4000, plasma (EDTA) 1:4,000, and plasma (heparin) 1:8000. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean C1 inhibitor concentration was determined to be 9,502 ng/mL in serum, 8,496 ng/mL in plasma (citrate), 4,285 ng/mL in plasma (EDTA), and 26,756 ng/mL in plasma (heparin).

Interpolated concentrations of native C1 inhibitor in human serum and plasma samples



Interpolated concentrations of native C1 inhibitor in human HepG2 cell culture supernatant

HepG2 cells were cultured for 5 days in DMEM media containing 10% FBS and 1% NEAA. The concentrations of C1 inhibitor were measured in duplicate and interpolated from the C1 inhibitor standard curve and corrected for sample dilution. Undiluted samples are 18.75%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean C1 inhibitor concentration was determined to be 1,303 pg/mL.



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 C1 inhibitor concentration was determined to be 12,259 pg/mL with a range of 39.7-20,572 pg/mL.

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 C1 inhibitor ELISA Kit
(ab224883)

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

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