

Human CEA ELISA Kit ab264604

リコンビナント SimpleStep ELISA

2 References 画像数 7

製品の概要

製品名	Human CEA 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
	extract	8		CV%
				5%
	Inter-Assay (日差再現性)			
	サンプル	N	平均値	SD
	extract	3		CV%
				5.4%
サンプルの種類	Serum, Cell culture extracts, Tissue Extracts, Cell Lysate, Cell culture media, Hep Plasma, EDTA Plasma, Cit plasma			
アッセイタイプ	Sandwich (quantitative)			
検出感度	24.68 pg/ml			
検出範囲	78.13 pg/ml - 5000 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
Serum	100	92% - 116%
Cell culture extracts	108	95% - 122%
Tissue Extracts	109	104% - 117%
Cell culture media	93	84% - 99%
Hep Plasma	101	90% - 110%
EDTA Plasma	98	91% - 110%

サンプルの種類	平均 %	測定範囲
Cit plasma	105	91% - 111%

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 CEA ELISA Kit (ab264604) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of CEA protein in cit plasma, edta plasma, hep plasma, serum, tissue extracts, cell culture extracts, cell lysate, and cell culture media. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human CEA with 24.68 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

CEA is encoded by the CECAM5 gene which produces a cell adhesion molecule consisting of an Ig variable region-like amino-terminal domain followed by up to six Ig constant region-like domains anchored to the cell membrane by either a glycosylphosphatidylinositol (GPI) moiety or a proteinaceous transmembrane and cytoplasmic domain. CEA is normally expressed on epithelial cells and is found abundantly on the apical surface of the gastrointestinal epithelium, as well as the nasopharynx, lung, urogenital tract, and sweat glands. Under physiologic conditions, only low amounts of soluble CEA can be detected in serum. However, in many different cancers, CEA is highly up regulated.

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

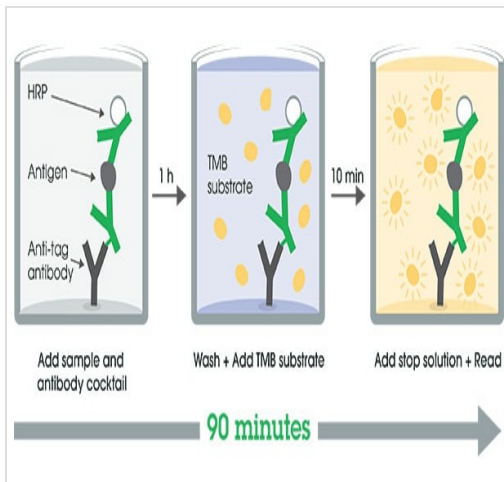
保存方法

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

内容	1 x 96 tests
10X Human CEA Capture Antibody	1 x 600μl
10X Human CEA 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 CPI - HAMA Blocker (ab193969)	1 x 6ml
Human CEA 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

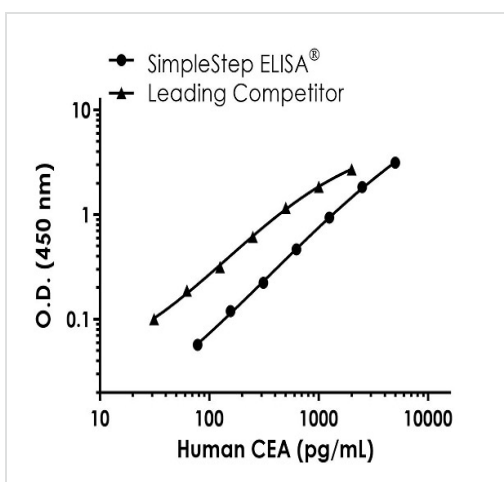
機能	Cell surface glycoprotein that plays a role in cell adhesion and in intracellular signaling. Receptor for E.coli Dr adhesins.
組織特異性	Found in adenocarcinomas of endodermally derived digestive system epithelium and fetal colon.
配列類似性	Belongs to the immunoglobulin superfamily. CEA family. Contains 7 Ig-like (immunoglobulin-like) domains.
翻訳後修飾	Complex immunoreactive glycoprotein with a MW of 180 kDa comprising 60% carbohydrate.
細胞内局在	Cell membrane.

画像



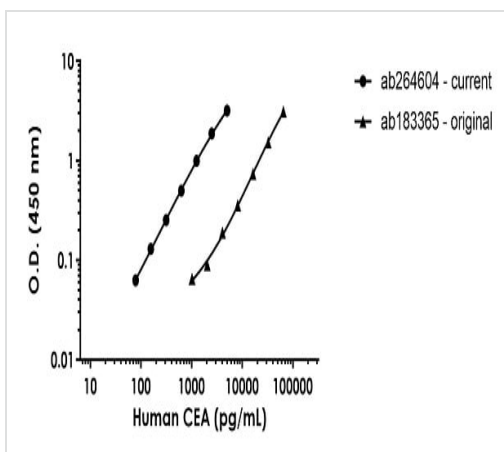
SimpleStep ELISA Protocol Diagram

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.



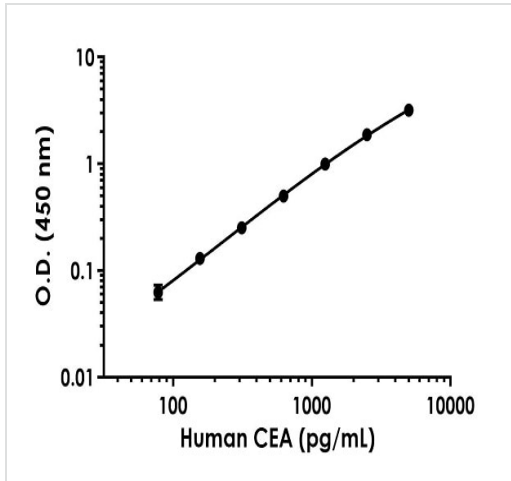
Human CEA standard curve comparison

Standard Curve comparison between human CEA SimpleStep ELISA kit and traditional ELISA kit from leading competitor. SimpleStep ELISA kit shows increased sensitivity.



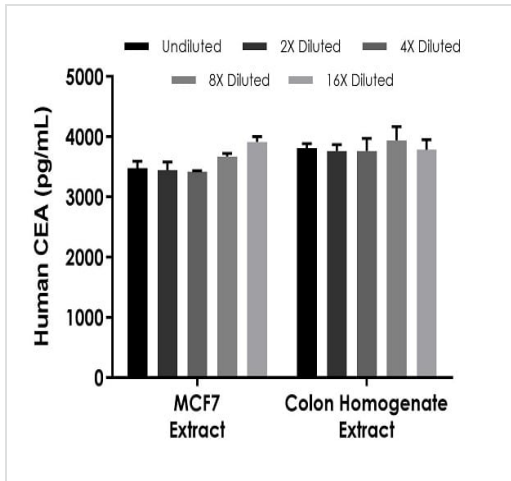
Human CEA Simplestep ELISA comparison

Standard Curve comparison between ab264604 and **ab183365** SimpleStep ELISA kits. ab264604 SimpleStep ELISA kit shows increased sensitivity.



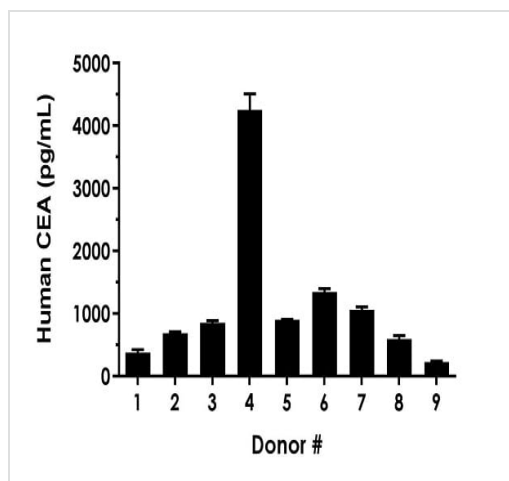
Example of human CEA standard curve in Sample Diluent NS.

The CEA 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 CEA in human MCF7 and colon homogenate extract samples based on 250 and 125 µg/mL extract loads, respectively.

The concentrations of CEA were measured in duplicate and interpolated from the CEA standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean CEA concentration was determined to be 3,584.91 pg/ml in MCF7 and 3,812.56 pg/mL in colon homogenate extract.



Interpolated dilution factor corrected values are plotted (mean \pm SD, $n=2$). The mean CEA concentration was determined to be 1,027.57 pg/mL with a range of ND – 4,257.59 pg/mL.

Serum from ten individual healthy human female donors was measured in duplicate, one donor of which was non-detectable (ND) by this assay.

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 CEA ELISA Kit
(ab264604)

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

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