abcam

Product datasheet

Human CD23 ELISA Kit ab272468

יעלשעבע SimpleStep ELISA

画像数6

製品の概要

製品名 Human CD23 ELISA Kit

検出方法 Colorimetric

再現性

サンプル	N	平均値	SD	CV%
Serum	7			3.3%

Inter-Assay(日差再現性)

Intra-Assay(同時再現性)

サンプル	N	平均值	SD	CV%
Serum	3			4.4%

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

アッセイタイプ Sandwich (quantitative)

検出感度 12 pg/ml

検出範囲 37.5 pg/ml - 2400 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
Urine	106	98% - 116%
Serum	92	85% - 98%
Hep Plasma	101	100% - 102%
EDTA Plasma	105	99% - 113%
Cit plasma	92	91% - 93%

全工程の試験時間

1h 30m

ステップ

One step assay

種交差性

製品の概要

交差種: Human

Human CD23 ELISA kit (<u>ab272199</u>) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of Human CD23 protein in serum, plasma, urine and cell culture supernatant. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human CD23 with 12 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 (<u>ab203359</u>) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.

特記事項

CD23, also known as Low Affinity Immunoglobulin Epsilon Fc Receptor, is a low-affinity receptor for immunoglobulin E (IgE) and CR2/CD21. It has essential roles in the regulation of IgE production and in the differentiation of B-cells. It is a B-cell-specific antigen. CD23 is a 47 kDa type II transmembrane glycoprotein containing a short N-terminal cytoplasmic tail, a transmembrane domain, and a large C-terminal extracellular domain containing C-type lectin domain. A soluble CD23 form also exists.

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.

	1 x 96 tests
10X Human CD23 Capture Antibody	1 x 600µl
10X Human CD23 Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent 5BI	1 x 6ml
Human CD23 Lyophilized Recombinant Protein	2 vials

内容	1 x 96 tests
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

機能 This receptor has essential roles in the regulation of IgE production and in the differentiation of B-

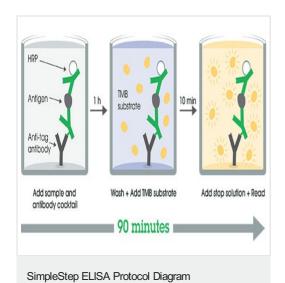
cells (it is a B-cell-specific antigen).

配列類似性 Contains 1 C-type lectin domain.

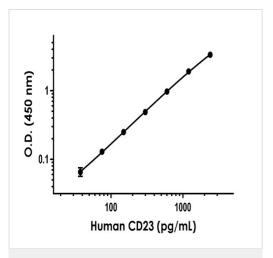
翻訳後修飾 N- and O-glycosylated.

細胞内局在 Cell membrane. Secreted. Also exists as a soluble excreted form.

画像

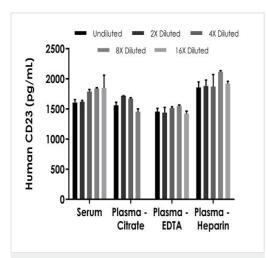


SimpleStep ELISA technology allows the formation of the antibodyantigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.



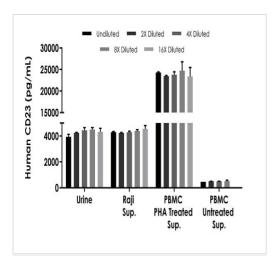
Example of human CD23 standard curve in Sample Diluent NS.

The CD23 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.



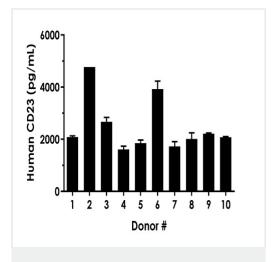
Interpolated concentrations of native CD23 in human serum and plasma samples.

The concentrations of CD23 were measured in duplicates, interpolated from the CD23 standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 100%, plasma (citrate) 25%, plasma (EDTA) 100% and plasma (heparin) 100%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean CD23 concentration was determined to be 1,741 pg/mL in neat serum, 1,601 pg/mL in neat plasma (citrate), 1,476 pg/mL in neat plasma (EDTA) and 1,930 pg/mL in neat plasma (heparin).



Interpolated concentrations of native CD23 in human urine, Raji cell culture supernatant and PBMC cell culture supernatant samples treated with or without 1.5% PHA for 36 hours.

The concentrations of CD23 were measured in duplicates, interpolated from the CD23 standard curves and corrected for sample dilution. Undiluted samples are as follows: urine 25%, Raji supernatant 50%, PBMC PHA treated supernatant 7% and PBMC untreated supernatant 100%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean CD23 concentration was determined to be 4,289 pg/mL in neat urine, 4,358 pg/mL in neat Raji supernatant, 23,923 pg/mL in neat PBMC PHA treated supernatant and 498 pg/mL in PBMC untreated supernatant.



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 CD23 concentration was determined to be 2,495 pg/mL with a range of 1,609 – 4,772 pg/mL.



To learn more about the advantages of recombinant antibodies see **here**.

Sandwich ELISA - Human CD23 ELISA Kit (ab272468)

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