

## Human Apolipoprotein A-IV ELISA Kit ab214567

**重组** SimpleStep ELISA

★★★★☆ [1 Abreviews](#) [1 References](#) [9 图像](#)

### 概述

**产品名称** 人Apolipoprotein A-IV ELISA试剂盒

**检测方法** Colorimetric

**精确度** 批次内

样品	n	Mean	SD	CV%
Serum	8			3.8%

批次间

样品	n	Mean	SD	CV%
Serum	3			6.4%

**样品类型** Cell culture supernatant, Saliva, Urine, Serum, Tissue Extracts, Hep Plasma, EDTA Plasma, Cit plasma

**检测类型** Sandwich (quantitative)

**灵敏度** 5.4 pg/ml

**范围** 250 pg/ml - 16000 pg/ml

**回收率** 特定样本回收率

样品类型	平均%	范围
Saliva	78	76% - 79%
Urine	97	95% - 98%
Serum	98	90% - 101%
Tissue Extracts	103	102% - 105%
Cell culture media	103	102% - 103%
Hep Plasma	98	95% - 101%

样品类型	平均%	范围
EDTA Plasma	104	102% - 107%
Cit plasma	91	90% - 94%

**检测时间**

1h 30m

**实验步骤**

One step assay

**种属反应性**

**与反应:** Human

**不与反应:** Cow

**产品概述**

Human Apolipoprotein A-IV ELISA Kit (ab214567) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of Apolipoprotein A-IV protein in cit plasma, edta plasma, hep plasma, saliva, serum, tissue extracts, urine, and cell culture supernatant. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human Apolipoprotein A-IV with 5.4 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.

**说明**

Human Apolipoprotein A-IV is a 45kDa glycoprotein with activities involving lipid transport. Specifically, Apolipoprotein A-IV is a component of high density lipoprotein (HDL) and chylomicrons. Its primarily synthesized is the intestine in association with lymph chylomicron particles. Although its precise function is not known, Apolipoprotein A-IV is a potent activator of lecithin-cholesterol acyltransferase (LCAT) *in vitro*. Human Apolipoprotein A-IV consists of a 20 amino acid (aa) signal peptide and 376 aa mature chain. Human Apolipoprotein A-IV is 62% identical to both mouse and rat Apolipoprotein A-IV.

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.

**平台**

Pre-coated microplate (12 x 8 well strips)

**性能**

**存放说明**

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

组件	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
Antibody Diluent 5BI	1 x 6ml
10X Human Apolipoprotein A-IV Capture Antibody	1 x 600µl
10X Human Apolipoprotein A-IV Detector Antibody	1 x 600µl
Human Apolipoprotein A-IV 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

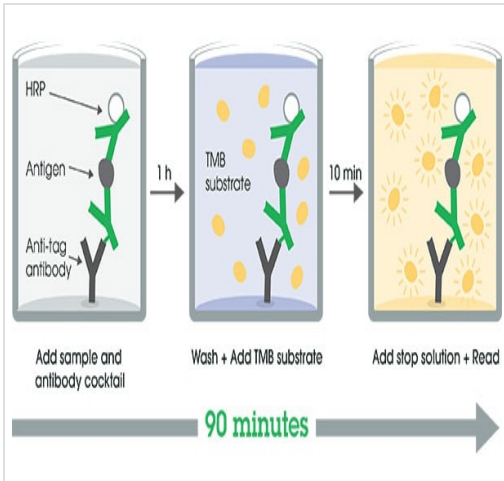
**相关性**

APOA4 (apolipoprotein A-IV) is a component of HDL and chylomicrons. Its primary site of synthesis is the intestine, in association with lymph chylomicron particles. Although its precise function is not known, APOA4 is a potent activator of lecithin-cholesterol acyltransferase (LCAT) in vitro. In rodents, Apo A-IV inhibits gastric emptying and serves as a satiety factor whose synthesis and secretion are increased by the ingestion of dietary fat. It also possesses anti-inflammatory and antiatherogenic properties

**细胞定位**

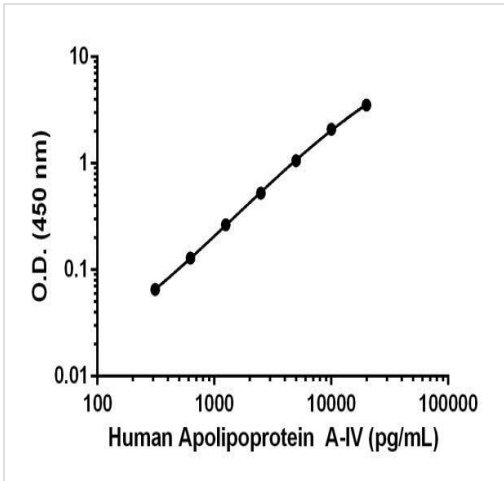
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**图片**



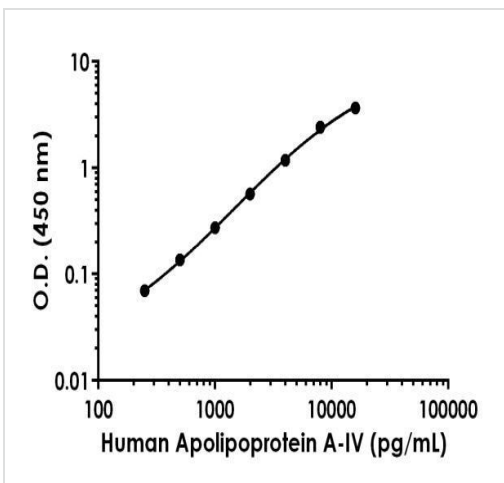
SimpleStep ELISA technology allows the formation of the antibody-antigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.

Other - Human Apolipoprotein A-IV ELISA Kit  
(ab214567)



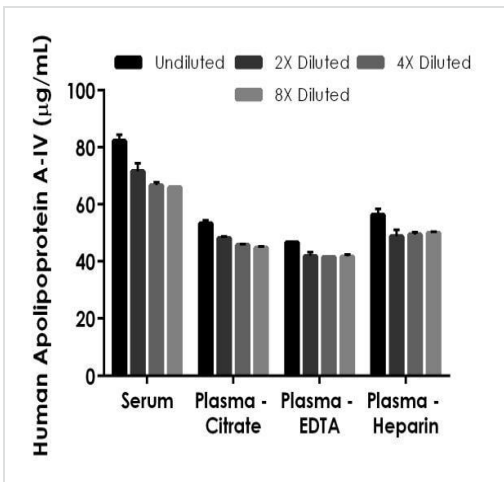
Background-subtracted data values (mean +/- SD) are graphed.

Example of human Apolipoprotein A-IV standard curve in Sample Diluent NS.



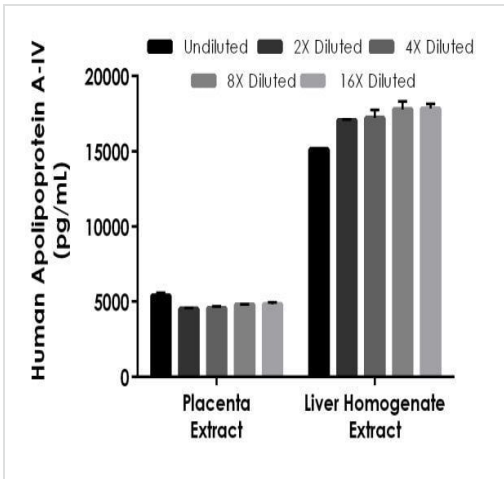
Background-subtracted data values (mean +/- SD) are graphed.

Example of human Apolipoprotein A-IV standard curve in Sample Diluent 1X Cell Extraction Buffer PTR.



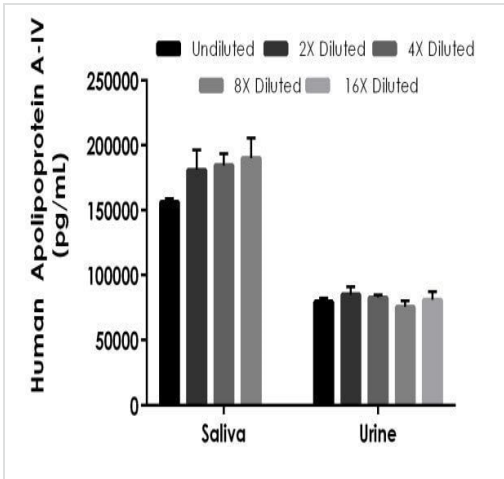
Interpolated concentrations of native Apolipoprotein A-IV in human serum and plasma samples.

The concentrations of Apolipoprotein A-IV were measured in duplicates, interpolated from the Apolipoprotein A-IV standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 1:32,000, plasma (citrate) 1:16,000, plasma (EDTA) 1:16,000, and plasma (heparin) 1:16000. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean Apolipoprotein A-IV concentration was determined to be 71.65 µg/mL in neat serum, 48.04 µg/mL in neat plasma (citrate), 42.94 µg/mL in neat plasma (EDTA) and 51.18 µg/mL in neat plasma (heparin).



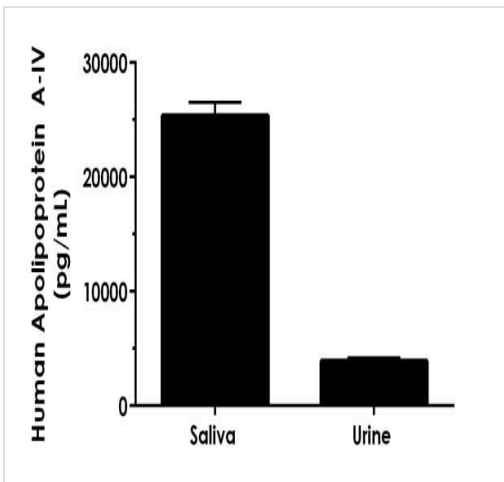
Interpolated concentrations of native Apolipoprotein A-IV in human placenta and human liver homogenate tissue extracts based on 500 µg/mL and 400 µg/mL extract loads, respectively.

The concentrations of Apolipoprotein A-IV were measured in duplicate and interpolated from the Apolipoprotein A-IV standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean Apolipoprotein A-IV concentration was determined to be 4,829 pg/mL in placenta extract and 17,016 pg/mL in liver homogenate extract.



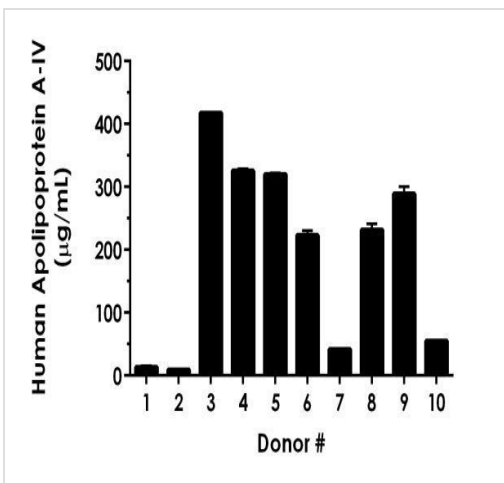
Interpolated concentrations of spiked Apolipoprotein A-IV in human saliva and urine samples.

The concentrations of Apolipoprotein A-IV were measured in duplicates, interpolated from the Apolipoprotein A-IV standard curves and corrected for sample dilution. Undiluted samples are as follows: saliva 6.25% and urine 12.5%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean Apolipoprotein A-IV concentration was determined to be 177,941 pg/mL in neat saliva (spiked) and 80,680 pg/mL in neat urine (spiked).



Interpolated concentrations of native Apolipoprotein A-IV in human saliva and urine samples.

Saliva was analyzed at 6.25% and urine at 12.5%. The concentrations of Apolipoprotein A-IV were measured in duplicates, interpolated from the Apolipoprotein A-IV standard curves and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean Apolipoprotein A-IV concentration was determined to be 25,370 pg/mL in neat saliva (native) and 3903 pg/mL in neat urine (native).



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 human Apolipoprotein A-IV concentration was determined to be 192.8 µg/mL with a range of 9.2 – 418.0 µg/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 Apolipoprotein A-IV  
ELISA Kit (ab214567)

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

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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