

Human Albumin ELISA Kit ab227933

重组 SimpleStep ELISA

★★★★★ 1 Abreviews 2 References 9 图像

概述

产品名称 人Albumin ELISA试剂盒

检测方法 Colorimetric

批次内				
样品	n	Mean	SD	CV%
Serum	9			4%

批次间				
样品	n	Mean	SD	CV%
Serum	3			12.6%

样品类型 Urine, Serum, Hep Plasma, EDTA Plasma, Cit plasma

检测类型 Sandwich (quantitative)

灵敏度 30 pg/ml

范围 312.5 pg/ml - 20000 pg/ml

特定样本回收率		
样品类型	平均%	范围
Urine	104	101% - 107%
Serum	117	106% - 133%
Hep Plasma	111	104% - 116%
EDTA Plasma	115	108% - 121%
Cit plasma	112	106% - 117%

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, Rhesus monkey

产品概述

Human Albumin ELISA Kit (ab227933) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of Albumin protein in cit plasma, edta plasma, hep plasma, serum, and urine. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human Albumin with 30 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.

CROSS REACTIVITY Purified mouse, bovine, and cynomolgus monkey serum albumin were prepared at 1,000,1000, and 500 ng/mL, respectively, and assayed for cross reactivity. No cross-reactivity was observed.

SPECIES REACTIVITY This kit recognizes Human Albumin protein. Other species reactivity was determined by measuring 1:5 million serum or plasma samples of various species, interpolating the protein concentrations from the human standard curve, and expressing the interpolated concentrations as a percentage of the protein concentration in human serum or plasma assayed at the same dilution. Reactivity < 3% was determined for the following species: Mouse, Rat, Cow and Rhesus Macaque

平台

Pre-coated microplate (12 x 8 well strips)

性能

存放说明

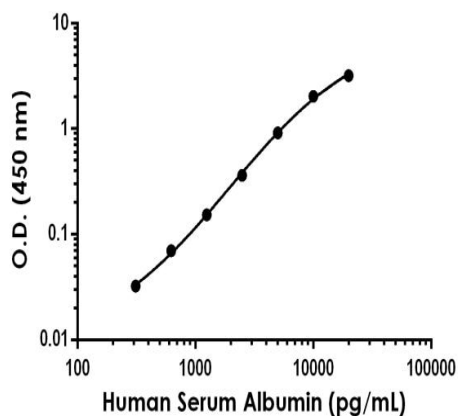
Store at +4°C. Please refer to protocols.

组件	1 x 96 tests	1 x 384 tests	1 x 96 tests
10X Human Albumin Capture Antibody	1 x 600µl	1 x 600µl	1 x 600µl
10X Human Albumin Detector Antibody	1 x 600µl	1 x 600µl	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml	2 x 20ml	1 x 20ml

组 件	1 x 96 tests	1 x 384 tests	1 x 96 tests
384 well CaptSure™ microplates	0 x 0 unit	1 unit	0 x 0 unit
Antibody Diluent CP2	1 x 6ml	1 x 6ml	1 x 6ml
Native Human Serum Albumin protein (Lyophilized) (ab205808)	2 vials	2 vials	2 vials
Plate Seals	1 unit	1 unit	1 unit
Sample Diluent NS (ab193972)	1 x 50ml	1 x 250ml	1 x 50ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit	0 x 0 unit	1 unit
Stop Solution	1 x 12ml	2 x 12ml	1 x 12ml
TMB Development Solution	1 x 12ml	2 x 12ml	1 x 12ml

功 能	Serum albumin, the main protein of plasma, has a good binding capacity for water, Ca(2+), Na(+), K(+), fatty acids, hormones, bilirubin and drugs. Its main function is the regulation of the colloidal osmotic pressure of blood. Major zinc transporter in plasma, typically binds about 80% of all plasma zinc.
组织特异性	Plasma.
疾病相关	Defects in ALB are a cause of familial dysalbuminemic hyperthyroxinemia (FDH) [MIM:103600]. FDH is a form of euthyroid hyperthyroxinemia that is due to increased affinity of ALB for T(4). It is the most common cause of inherited euthyroid hyperthyroxinemia in Caucasian population.
序列相似性	Belongs to the ALB/AFP/VDB family. Contains 3 albumin domains.
翻译后修饰	Kenitra variant is partially O-glycosylated at Thr-620. It has two new disulfide bonds Cys-600 to Cys-602 and Cys-601 to Cys-606. Glycated in diabetic patients. Phosphorylation sites are present in the extracellular medium. Acetylated on Lys-223 by acetylsalicylic acid.
细胞定位	Secreted.

图 片



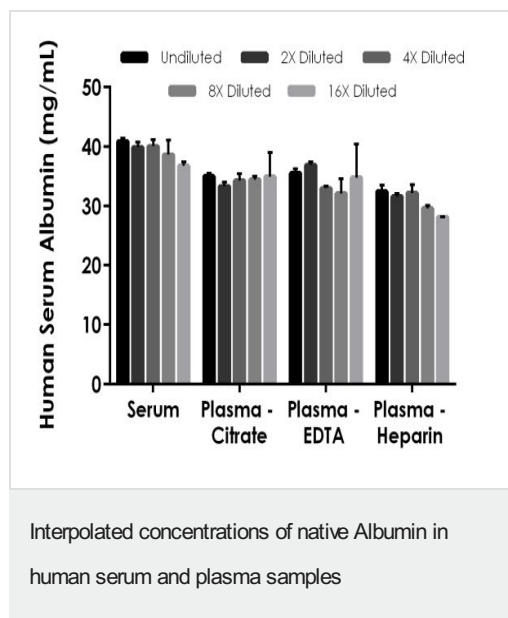
Example of human Albumin standard curve in
Sample Diluent NS

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

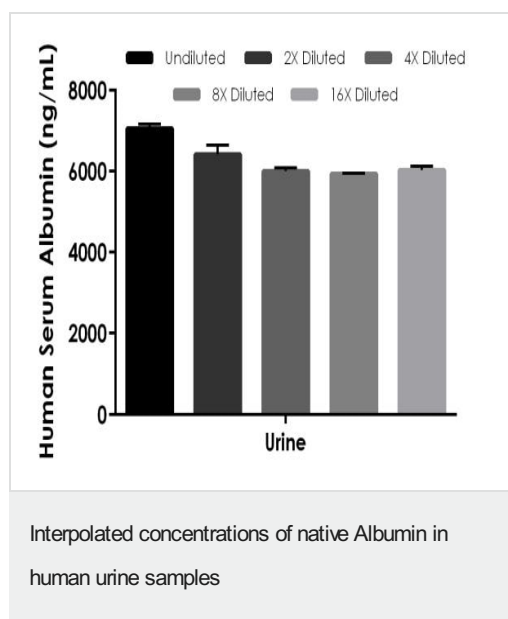
Standard Curve Measurements			
Concentration (pg/mL)	O.D 450 nm		Mean O.D
	1	2	
0	0.062	0.063	0.061
312.5	0.090	0.089	0.089
625	0.123	0.122	0.122
1,250	0.198	0.195	0.196
2,500	0.394	0.387	0.391
5,000	0.899	0.914	0.906
10,000	1.949	2.010	1.979
20,000	3.247	3.201	3.224

Standard curve

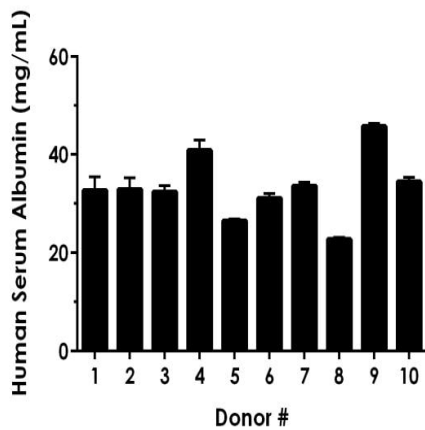
Example of human Albumin standard curve in Sample Diluent NS.
The Albumin standard curve was prepared as described. Raw data
values are shown in the table. Background-subtracted data values
(mean \pm SD) are graphed.



The concentrations of Serum Albumin were measured in duplicates, interpolated from the Serum Albumin standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 1:5 million, plasma (citrate) 1:5 million, plasma (heparin) 1:5 million, and plasma (EDTA) 1:10 million. The interpolated dilution factor corrected values are plotted (mean \pm SD, $n=2$). The mean Serum Albumin concentration was determined to be 39.3 mg/mL in serum, 34.4 mg/mL in plasma (citrate), 30.8 mg/mL in plasma (heparin), and 34.5 mg/mL in plasma (EDTA).



The concentrations of Serum Albumin were measured in duplicates, interpolated from the Serum Albumin standard curves and corrected for sample dilution. Undiluted samples are 1:500. The interpolated dilution factor corrected values are plotted (mean \pm SD, $n=2$). The mean Serum Albumin concentration was determined to be 6,290 ng/mL in urine.



Serum from ten individual healthy human female donors was measured in duplicate

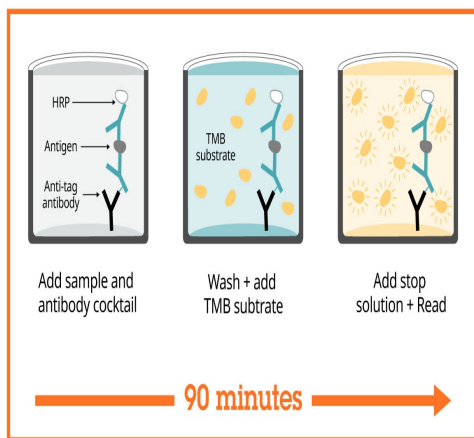
Interpolated dilution factor corrected values are plotted (mean \pm SD, $n=2$). The mean Serum Albumin concentration was determined to be 33.31 mg/mL with a range of 22.5 – 46.2 mg/mL.

Dilution Factor	Interpolated value	1:5 million Human Serum	1:5 million Human Plasma (Citrate)	1:10 million Human Plasma (EDTA)	1:5 million Human Plasma (Heparin)	1:500 Urine
Undiluted	pg/mL	8,184	7,013	3,558	6,500	14,111
	% Expected value	100	100	100	100	100
2	pg/mL	3,994	3,337	1,848	3,163	6,415
	% Expected value	98	95	104	97	91
4	pg/mL	2,005	1,717	826	1,612	3,002
	% Expected value	98	98	93	99	85
8	pg/mL	967	862	402	741	1,483
	% Expected value	95	98	90	91	84
16	pg/mL	460	437	217	352	754
	% Expected value	90	100	98	87	85

Linearity of dilution.

Linearity of dilution is determined based on interpolated values from the standard curve. Linearity of dilution defines a sample concentration interval in which interpolated target concentrations are directly proportional to sample dilution.

Native Albumin was measured in the following biological samples in a 2-fold dilution series. Sample dilutions are made in Sample Diluent NS.



Sandwich ELISA - Human Albumin ELISA Kit
(ab227933)

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.

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 Albumin ELISA Kit
(ab227933)

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

**Get more done with
SimpleStep ELISA**



Easy to use

Single-wash 90-minute protocol



Flexible

Matched antibody pairs available



Precision antibodies

High sensitivity, specificity and reproducibility



Scalable

Now in 10-pack and 384-well formats

To learn more about the advantages of SimpleStep ELISA® kits see [here](#).

Sandwich ELISA - Human Albumin ELISA Kit
(ab227933)

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

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.cn/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors