

Mouse Apo B ELISA Kit ab230932

Recombinant SimpleStep ELISA<sup>®</sup>

9 References 9 Images

Overview

Product name	Mouse Apo B ELISA Kit				
Detection method	Colorimetric				
Precision	Intra-assay				
	Sample	n	Mean	SD	CV%
	Serum	8			2.4%
	Inter-assay				
	Sample	n	Mean	SD	CV%
	Serum	3			3.9%
Sample type	Cell culture supernatant, Serum, Hep Plasma, EDTA Plasma, Cit plasma				
Assay type	Sandwich (quantitative)				
Sensitivity	196 pg/ml				
Range	1.56 ng/ml - 100 ng/ml				
Recovery	Sample specific recovery				
	Sample type		Average %		Range
	Serum		83		75% - 95%
	Cell culture media		104		99% - 107%
	Hep Plasma		98		91% - 107%
	EDTA Plasma		88		79% - 98%
	Cit plasma		86		75% - 99%
Assay time	1h 30m				
Assay duration	One step assay				

## Species reactivity

## Product overview

### Reacts with: Mouse

Mouse Apo B ELISA Kit (ab230932) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of Apo B protein in cit plasma, edta plasma, hep plasma, and serum. It uses our proprietary SimpleStep ELISA® technology. Quantitate Mouse Apo B with 196 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.

### ASSAY SPECIFICITY

This kit recognizes both native and recombinant mouse ApoB protein in serum, plasma, and cell culture supernatant samples only.

### SPECIES REACTIVITY

This kit recognizes native and recombinant mouse ApoB protein. Other species reactivity was determined by measuring human serum samples, interpolating the protein concentrations from the standard curve, and expressing the interpolated concentrations as a percentage of the protein concentration in serum assayed at the same dilution. Reactivity < 3% was determined for Human

## Platform

Pre-coated microplate (12 x 8 well strips)

## Properties

### Storage instructions

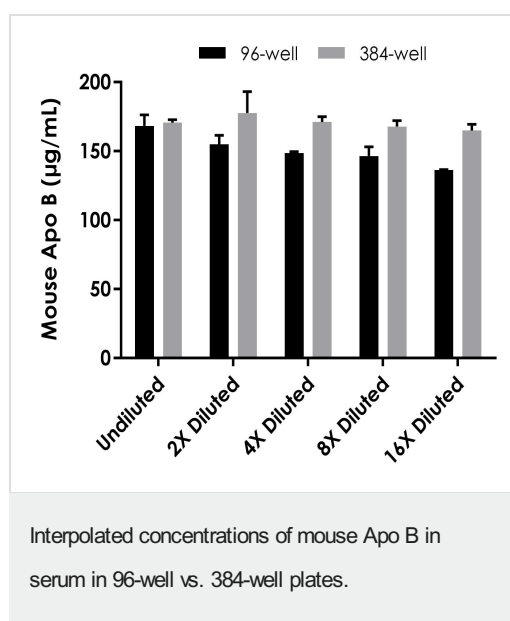
Store at +4°C. Please refer to protocols.

Components	1 x 96 tests	10 x 96 tests	1 x 384 tests
10X Mouse ApoB Capture Antibody	1 x 600µl	1 x 6000µl	1 x 600µl
10X Mouse ApoB Detector Antibody	1 x 600µl	1 x 6000µl	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml	1 x 200ml	1 x 20ml
384 well CaptSure™ microplates	0 x 0 unit	0 x 0 unit	1 unit
Antibody Diluent 5BR	1 x 6ml	10 x 6ml	1 x 6ml

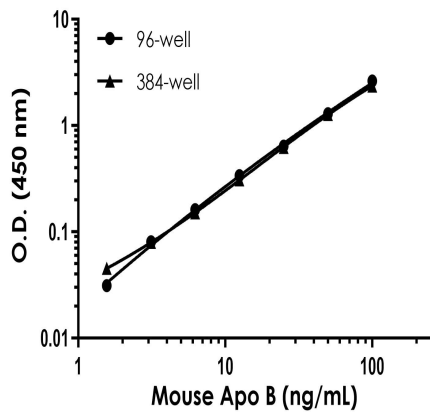
Components	1 x 96 tests	10 x 96 tests	1 x 384 tests
Mouse ApoB Lyophilized Recombinant Protein	2 vials	2 x 10 vials	2 vials
Plate Seals	1 unit	1 x 10 units	1 unit
Sample Diluent NS (ab193972)	1 x 50ml	2 x 250ml	1 x 250ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit	1 x 10 units	0 x 0 unit
Stop Solution	1 x 12ml	1 x 120ml	2 x 12ml
TMB Development Solution	1 x 12ml	1 x 120ml	2 x 12ml

<b>Function</b>	Apolipoprotein B is a major protein constituent of chylomicrons (apo B-48), LDL (apo B-100) and VLDL (apo B-100). Apo B-100 functions as a recognition signal for the cellular binding and internalization of LDL particles by the apoB/E receptor.
<b>Involvement in disease</b>	Hypobetalipoproteinemia, familial, 1 Familial ligand-defective apolipoprotein B-100 Defects in APOB associated with defects in other genes (polygenic) can contribute to hypocholesterolemia.
<b>Sequence similarities</b>	Contains 1 vitellogenin domain.
<b>Post-translational modifications</b>	Palmitoylated; structural requirement for proper assembly of the hydrophobic core of the lipoprotein particle.
<b>Cellular localization</b>	Cytoplasm. Secreted.

## Images

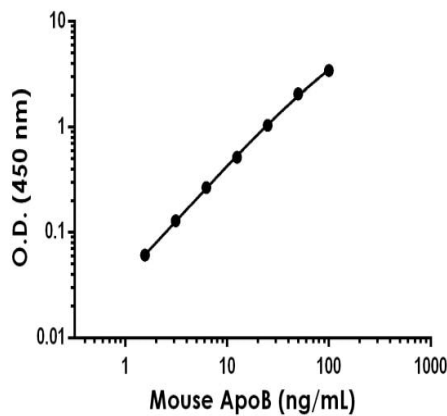


Interpolated concentration of native Apo B was measured in duplicate at different sample concentrations in 96-well vs. 384-well plates. Undiluted samples are 1:2,000 serum. The interpolated dilution factor corrected values are plotted (mean  $\pm$  SD, n=2). Sample dilutions are made in Sample Diluent NS.



Example of mouse Apo B standard curve in 96-well vs. 384-well plate. Background-subtracted data values (mean +/- SD) are graphed.

Example of mouse Apo B standard curve in Sample Diluent NS in 96-well vs. 384-well plate.



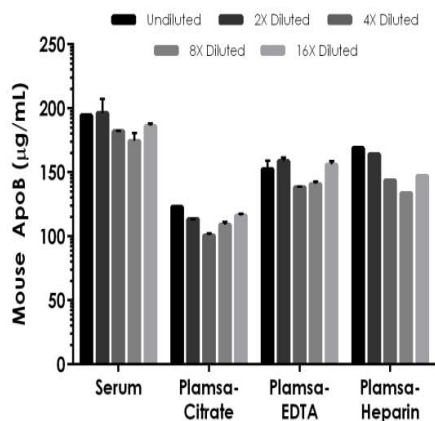
Background-subtracted data values (mean +/- SD) are graphed.

Example of ApoB standard curve in Sample Diluent NS.

Standard Curve Measurements			
Concentration (ng/mL)	O.D 450 nm		Mean O.D
	1	2	
0	0.072	0.066	0.069
1.56	0.133	0.127	0.130
3.13	0.202	0.195	0.198
6.25	0.347	0.328	0.337
12.5	0.599	0.577	0.588
25	1.126	1.100	1.113
50	2.131	2.149	2.140
100	3.513	3.486	3.499

Example of ApoB standard curve in Sample Diluent NS. The mouse ApoB standard curve was prepared as described. Raw data values are shown in the table. Background-subtracted data values (mean +/- SD) are graphed.

Standard curve



Interpolated concentrations of native mouse ApoB in serum and plasma samples.

The concentrations of ApoB were measured in duplicate, interpolated from the mouse ApoB standard curve and corrected for sample dilution. Undiluted samples are as follows: serum 1:2000, plasma (citrate) 1:2000, plasma (EDTA) 1:2000, and plasma (heparin) 1:2000. The interpolated dilution factor corrected values are plotted (mean  $\pm$  SD,  $n=2$ ). The mean ApoB concentration was determined to be 187.00 µg/mL in serum, 114.525 µg/mL in plasma (citrate) and 149.723 µg/mL in plasma (EDTA), and 152.208 µg/mL in plasma (Heparin).

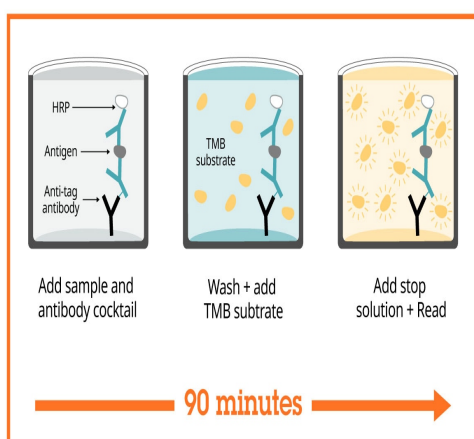
Dilution Factor	Interpolated value	1:2000 Mouse Serum	1:2000 Mouse Plasma (Citrate)	1:2000 Mouse Plasma (EDTA)	1:2000 Mouse Plasma (Heparin)	50% 10F RPMI Culture Media
Undiluted	ng/mL	97.3	61.5	76.3	85.5	50.7
	% Expected value	100	100	100	100	100
2	ng/mL	49.1	28.3	39.7	41.9	23.4
	% Expected value	101	92	104	98	92
4	ng/mL	22.8	12.6	17.3	18.1	11.6
	% Expected value	94	82	91	85	91
8	ng/mL	10.9	6.3	8.8	8.5	5.7
	% Expected value	90	89	92	80	91
16	ng/mL	5.8	3.4	4.9	4.7	3.0
	% Expected value	96	94	102	87	95

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

Recombinant ApoB was spiked into the following biological samples and diluted in a 2-fold dilution series in Sample Diluent NS.



Sandwich ELISA - Mouse Apo B ELISA Kit (ab230932)

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 - Mouse Apo B ELISA Kit  
(ab230932)

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

Sandwich ELISA - Mouse Apo B ELISA Kit  
(ab230932)

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

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

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