

Human FABP2 ELISA Kit ab234566

Recombinant SimpleStep ELISA

★★★★★ 1 Abreviews 9 Images

Overview

Product name Human FABP2 ELISA Kit

Detection method Colorimetric

Precision Intra-assay

Sample	n	Mean	SD	CV%
Serum	9			1.8%

Inter-assay

Sample	n	Mean	SD	CV%
Serum	3			3.3%

Sample type Cell culture supernatant, Urine, Serum, Cell culture extracts, Hep Plasma, EDTA Plasma, Cit plasma

Assay type Sandwich (quantitative)

Sensitivity 1.7 pg/ml

Range 12.5 pg/ml - 800 pg/ml

Recovery Sample specific recovery

Sample type	Average %	Range
Urine	83	82% - 85%
Serum	119	111% - 125%
Cell culture extracts	95	92% - 97%
Cell culture media	100	98% - 102%
Hep Plasma	108	103% - 110%
EDTA Plasma	115	109% - 120%

Sample type	Average %	Range
Cit plasma	113	105% - 118%

Assay time

1h 30m

Assay duration

One step assay

Species reactivity

Reacts with: Human

Does not react with: Cow

Product overview

Human FABP2 ELISA Kit (ab234566) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of FABP2 protein in cell culture extracts, cell culture supernatant, cit plasma, edta plasma, hep plasma, serum, and urine. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human FABP2 with 1.7 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.

Notes

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.

Platform

Pre-coated microplate (12 x 8 well strips)

Properties
Storage instructions

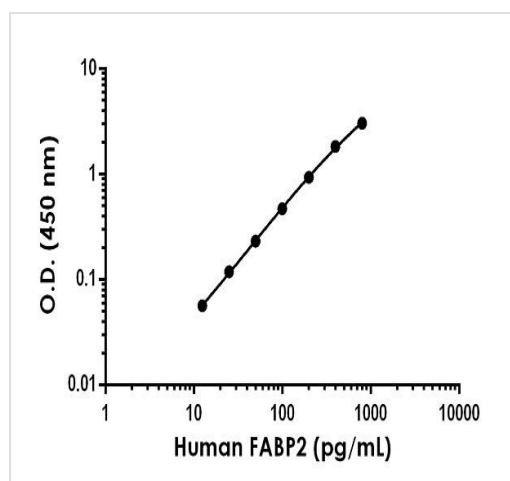
Store at +4°C. Please refer to protocols.

Components	1 x 96 tests
10X Human FABP2 Capture Antibody	1 x 600µl
10X Human FABP2 Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml

Components	1 x 96 tests
5X Cell Extraction Buffer PTR (ab193970)	1 x 10ml
Antibody Diluent 4BR	1 x 6ml
Human FABP2 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

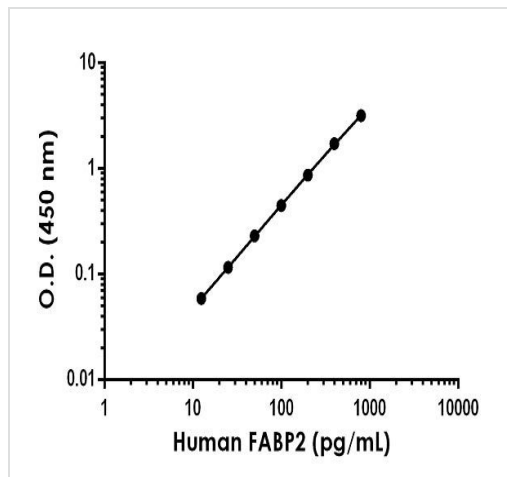
Function	FABP are thought to play a role in the intracellular transport of long-chain fatty acids and their acyl-CoA esters. FABP2 is probably involved in triglyceride-rich lipoprotein synthesis. Binds saturated long-chain fatty acids with a high affinity, but binds with a lower affinity to unsaturated long-chain fatty acids. FABP2 may also help maintain energy homeostasis by functioning as a lipid sensor.
Tissue specificity	Expressed in the small intestine and at much lower levels in the large intestine. Highest expression levels in the jejunum.
Sequence similarities	Belongs to the calycin superfamily. Fatty-acid binding protein (FABP) family.
Domain	Forms a beta-barrel structure that accommodates the hydrophobic ligand in its interior.
Cellular localization	Cytoplasm.

Images



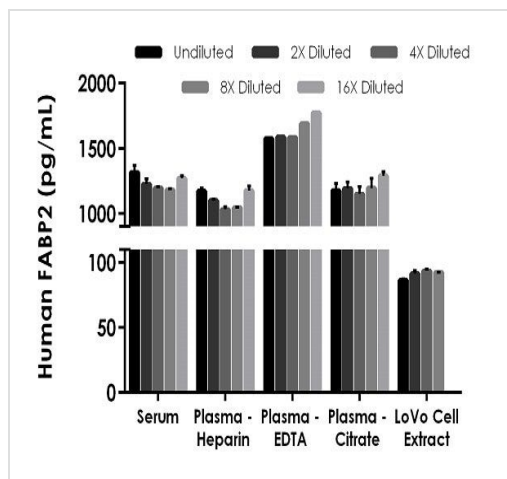
Example of human FABP2 standard curve in Sample Diluent NS.

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



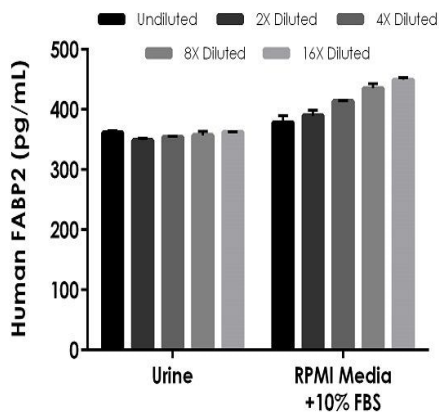
Example of human FABP2 standard curve in 1X Cell Extraction Buffer PTR.

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



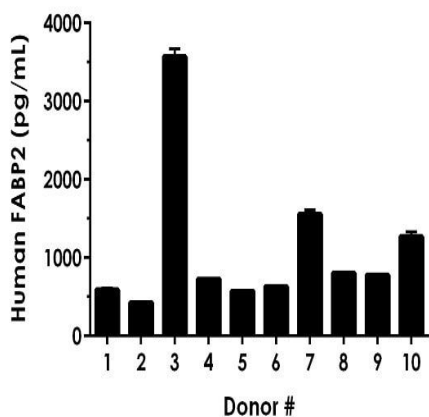
Interpolated concentrations of native FABP2 in human serum, plasma, and LoVo cell extract samples.

The concentrations of FABP2 were measured in duplicates, interpolated from the FABP2 standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 50%, plasma (heparin) 50%, plasma (EDTA) 25%, plasma (citrate) 50%, and LoVo extract 750 μ g/mL. The interpolated dilution factor corrected values are plotted (mean \pm SD, $n=2$). The mean FABP2 concentration in the neat samples was determined to be 1,248 pg/mL in serum, 1,104 pg/mL in plasma (heparin), 1,642 pg/mL in plasma (EDTA), and 1,199 pg/mL in plasma (citrate).



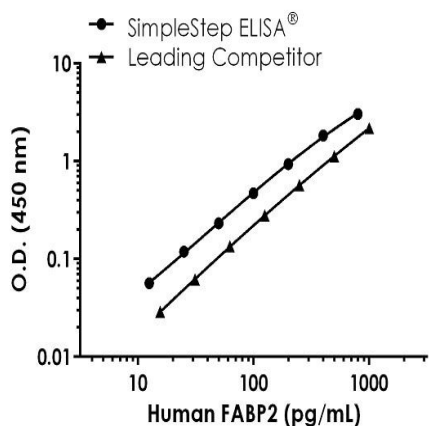
Interpolated concentrations of spiked FABP2 in human urine and RPMI media with 10% FBS.

The concentrations of FABP2 were measured in duplicate and interpolated from the FABP2 standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean \pm SD, $n=2$).



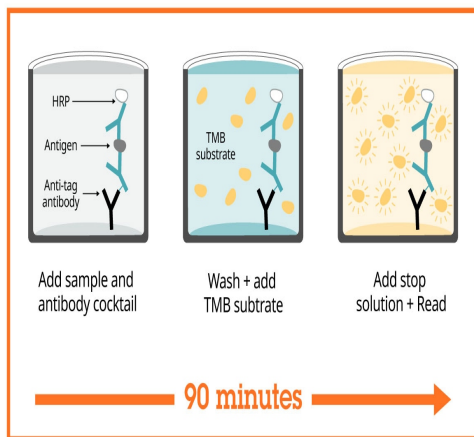
Interpolated dilution factor corrected values are plotted (mean \pm SD, $n=2$). The mean FABP2 concentration was determined to be 1,094 pg/mL with a range of 422 – 3,639 pg/mL.

Serum from ten individual healthy human male donors was measured in duplicate.



Standard curve comparison between human FABP2 SimpleStep ELISA® kit and traditional ELISA kit from leading competitor. SimpleStep ELISA kit shows increased sensitivity.

Human FABP2 Competitor Std Curve Comparison



Sandwich ELISA - Human FABP2 ELISA Kit
(ab234566)

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 FABP2 ELISA Kit
(ab234566)

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 - Human FABP2 ELISA Kit
(ab234566)

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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