

Human Liver-FABP ELISA Kit ab218261

Recombinant SimpleStep ELISA[®]

1 References 6 Images

Overview

Product name Human Liver-FABP ELISA Kit

Detection method Colorimetric

Precision	Intra-assay				
	Sample	n	Mean	SD	CV%
	Overall	5			6.2%

					Inter-assay
Sample	n	Mean	SD	CV%	
Overall	3			4.2%	

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

Assay type Sandwich (quantitative)

Sensitivity 9.4 pg/ml

Range 14.8 pg/ml - 950 pg/ml

Recovery	Sample specific recovery		
	Sample type	Average %	Range
	Cell culture supernatant	103	97% - 113%
	Urine	104	101% - 105%
	Serum	97	93% - 101%
	Hep Plasma	85	81% - 92%
	EDTA Plasma	93	87% - 98%
	Cit plasma	88	82% - 94%

Assay time	1h 30m
Assay duration	One step assay
Species reactivity	Reacts with: Human Does not react with: Cow
Product overview	<p>Human Liver-FABP ELISA Kit (ab218261) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of Liver-FABP protein in cell culture supernatant, cit plasma, edta plasma, hep plasma, serum, and urine. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human Liver-FABP with 9.4 pg/ml sensitivity.</p> <p>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:</p> <ul style="list-style-type: none"> - 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 <p>A 384-well SimpleStep ELISA® microplate (ab203359) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.</p>
Notes	Liver-FABP is a 14 kDa member of the FABP family. Liver-FABP binds and transports cholesterol, free fatty acids and their coenzyme A derivatives, bilirubin, and some other small molecules. A variety of cells express Liver-FABP, including hepatocytes, simple columnar epithelium of the small intestine, and proximal tubular epithelium of the kidney.
Platform	Pre-coated microplate (12 x 8 well strips)

Properties

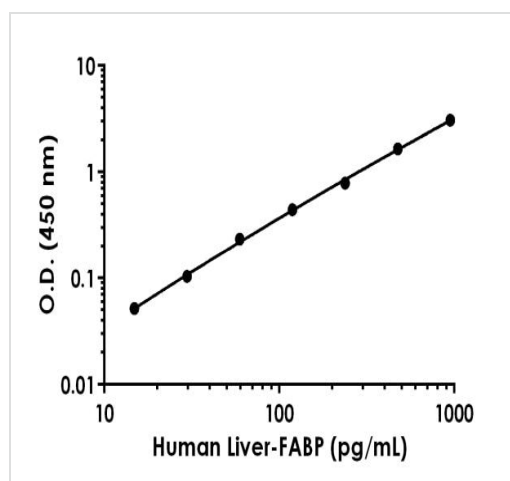
Storage instructions Store at +4°C. Please refer to protocols.

Components	1 x 96 tests
10X Human Liver-FABP Capture Antibody	1 x 600µl
10X Human Liver-FABP Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent 5BI	1 x 6ml
Human L-FABP Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent NS (ab193972)	1 x 50ml

Components	1 x 96 tests
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

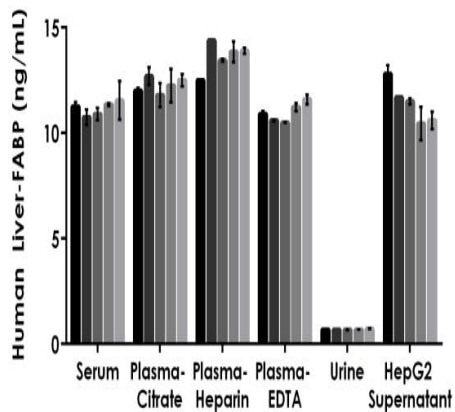
Function	Binds free fatty acids and their coenzyme A derivatives, bilirubin, and some other small molecules in the cytoplasm. May be involved in intracellular lipid transport.
Sequence similarities	Belongs to the calycin superfamily. Fatty-acid binding protein (FABP) family.
Domain	Forms a beta-barrel structure that accommodates hydrophobic ligands in its interior.
Cellular localization	Cytoplasm.

Images



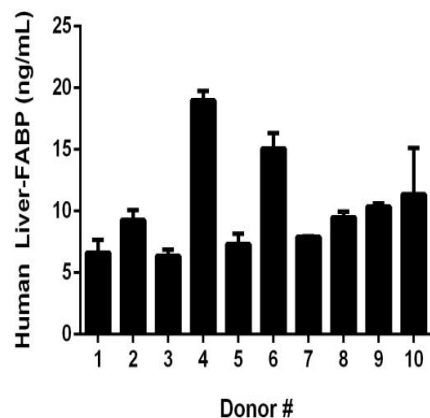
Background-subtracted data values (mean \pm SD) are graphed.

Example of Human Liver-FABP standard curve in
Sample Diluent NS



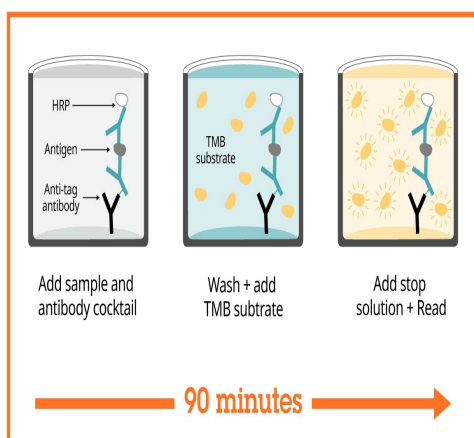
Interpolated concentrations of native Liver-FABP in human serum, plasma, urine, and cell culture supernatant samples.

The concentrations of Liver-FABP were measured in duplicates, interpolated from the Liver-FABP standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 7.5%, plasma (citrate) 7.5%, plasma (heparin) 7.5%, plasma EDTA) 7.5%, urine 50 %, and spleen HepG2 supernatant 2.5%. The interpolated dilution factor corrected values are plotted (mean \pm SD, $n=2$). The mean Liver-FABP concentration was determined to be 11.2 ng/mL in serum, 12.2 ng/mL in plasma (citrate) and 13.6 ng/mL in plasma (heparin), 11.0 ng/mL in plasma (EDTA), 0.682 ng/mL in urine, and 11.4 ng/mL in HepG2 supernatant.



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

Interpolated dilution factor corrected values are plotted (mean \pm SD, $n=2$). The mean Liver-FABP concentration was determined to be 10.3 ng/mL with a range of 6.36 – 19.0 ng/mL.



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.

Sandwich ELISA - Human Liver-FABP ELISA Kit
(ab218261)

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

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

**Get more done with
SimpleStep ELISA**



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

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