

Product datasheet

Human H-FABP ELISA Kit ab243682

Recombinant SimpleStep ELISA[®]

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Overview

Product name Human H-FABP ELISA Kit

Detection method Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%
serum	8			3.1%

Inter-assay

Sample	n	Mean	SD	CV%
serum	2			12.4%

Sample type

Milk, Serum, Tissue Extracts, Hep Plasma, Cit plasma, Cerebral Spinal Fluid

Assay type

Sandwich (quantitative)

Sensitivity

2.4 pg/ml

Range

10.9 pg/ml - 700 pg/ml

Recovery

Sample specific recovery

Sample type	Average %	Range
Milk	87	82% - 94%
Serum	86	82% - 90%
Tissue Extracts	106	104% - 108%
Hep Plasma	91	89% - 94%
Cit plasma	100	95% - 103%
Cerebral Spinal Fluid	110	107% - 113%

Assay time	1h 30m
Assay duration	One step assay
Species reactivity	Reacts with: Cow, Human
Product overview	Human H-FABP ELISA Kit (ab243682) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of H-FABP protein in hep plasma, milk, serum, tissue extracts, and cit plasma. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human H-FABP with 2.4 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.

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 H-FABP Capture Antibody	1 x 600µl
10X Human H-FABP Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
5X Cell Extraction Buffer PTR (ab193970)	1 x 10ml
Antibody Diluent 4BI	1 x 6ml
Human H-FABP Lyophilized Recombinant Protein	2 vials
Plate Seal	1 unit

Components	1 x 96 tests
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

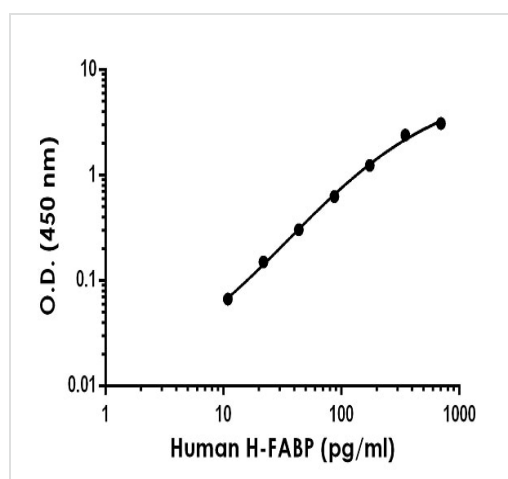
Function FABP are thought to play a role in the intracellular transport of long-chain fatty acids and their acyl-CoA esters.

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.

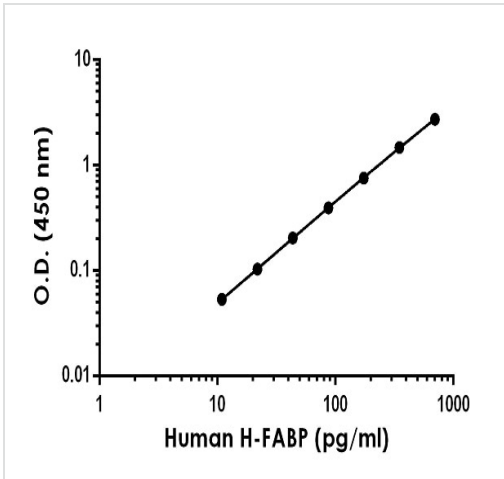
Cellular localization Cytoplasm.

Images



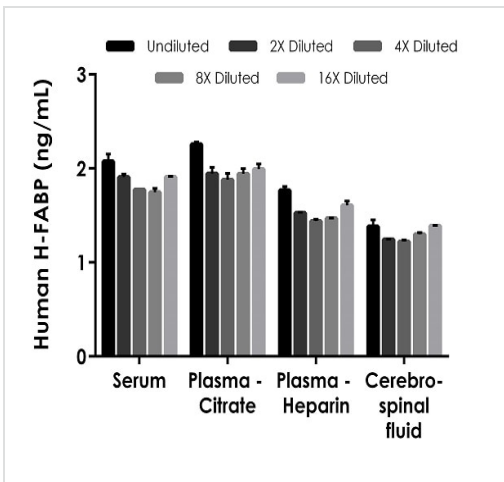
The H-FABP standard curve was prepared as described in Section 10. Raw data values are shown in the table. Background-subtracted data values (mean +/- SD) are graphed.

Example of human H-FABP standard curve in Sample Diluent NS.



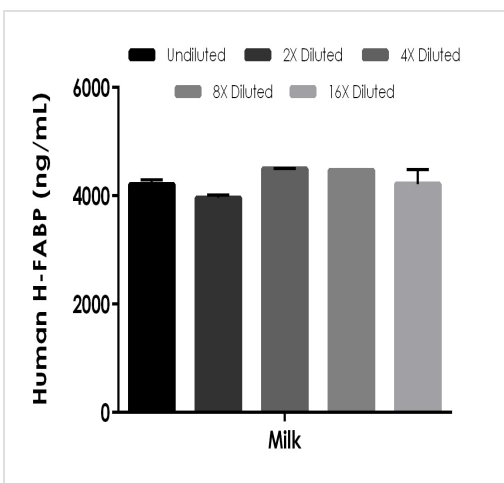
Example of human H-FABP standard curve in 1X cell extraction buffer PTR.

The H-FABP standard curve was prepared as described in Section 10. Raw data values are shown in the table. Background-subtracted data values (mean +/- SD) are graphed.



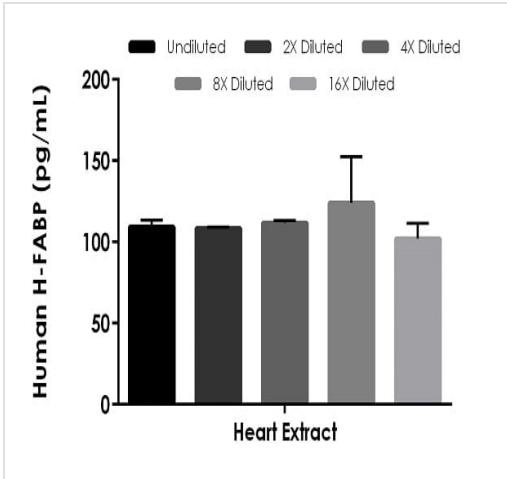
Interpolated concentrations of native H-FABP in human serum, plasma and CSF samples.

The concentrations of H-FABP were measured in duplicates, interpolated from the H-FABP standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 25%, plasma (citrate) 25%, plasma (heparin) 25%, cerebrospinal fluid 25%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean H-FABP concentration was determined to be 1.93 ng/mL in serum, 2.05 ng/mL in plasma (citrate), 1.57 ng/mL in plasma (heparin), and 1.3 ng/mL in cerebrospinal fluid.



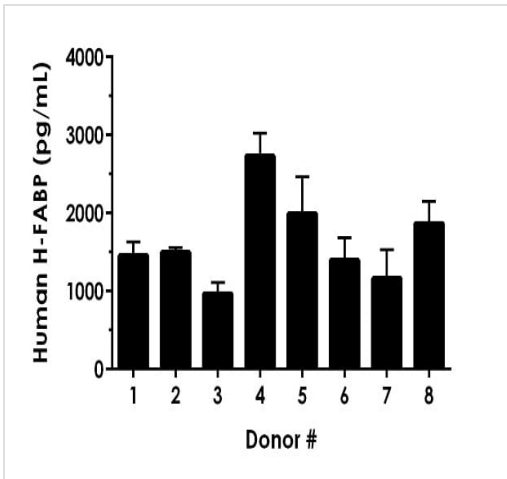
Interpolated concentrations of native H-FABP in human milk sample.

The concentrations of H-FABP were measured in duplicates, interpolated from the H-FABP standard curves and corrected for sample dilution. Undiluted samples are as follows: milk 1:50,000. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean H-FABP concentration was determined to be 4,273 ng/mL in milk 1:100,000.



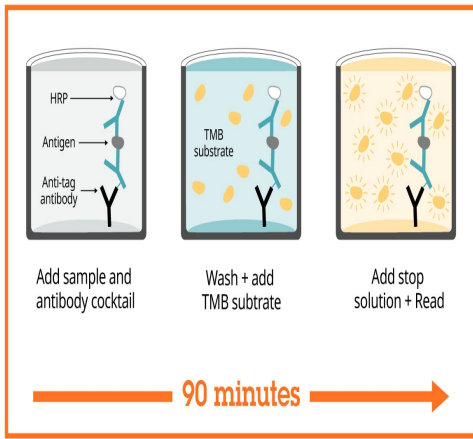
Interpolated concentrations of native H-FABP in human heart extract based on a 13 ng/mL extract load.

The concentrations of H-FABP were measured in duplicate and interpolated from the H-FABP standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2).



Serum from eight individual healthy human female donors was measured in duplicate.

Interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean H-FABP concentration was determined to be 1,635.8 pg/mL with a range of 873 – 2,940 pg/mL.



Sandwich ELISA - Human H-FABP ELISA Kit
(ab243682)

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 H-FABP ELISA Kit
(ab243682)

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

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