

Product datasheet

Human FGF19 ELISA Kit ab230943

Recombinant SimpleStep ELISA

[8 Images](#)

Overview

Product name Human FGF19 ELISA Kit

Detection method Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%
Supernatant	5			3.8%

Inter-assay

Sample	n	Mean	SD	CV%
Supernatant	3			6.6%

Sample type

Cell culture supernatant, Serum, Hep Plasma, EDTA Plasma, Cit plasma

Assay type

Sandwich (quantitative)

Sensitivity

1.4 pg/ml

Range

3.91 pg/ml - 250 pg/ml

Recovery

Sample specific recovery

Sample type	Average %	Range
Serum	112	106% - 117%
Cell culture media	108	107% - 110%
Hep Plasma	108	101% - 116%
EDTA Plasma		94% - 99%
Cit plasma	100	97% - 105%

Assay time

1h 30m

Assay duration

One step assay

Species reactivity**Reacts with:** Human**Does not react with:** Cow**Product overview**

Human FGF19 ELISA Kit (ab230943) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of FGF19 protein in cit plasma, edta plasma, hep plasma, and serum. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human FGF19 with 1.4 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.

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 FGF19 Capture Antibody	1 x 600µl
10X Human FGF19 Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent 4BI	1 x 6ml
Human FGF19 Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
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

Involved in the suppression of bile acid biosynthesis through down-regulation of CYP7A1

expression, following positive regulation of the JNK and ERK1/2 cascades. Stimulates glucose uptake in adipocytes. Activity requires the presence of KLB.

Tissue specificity

Expressed in fetal brain, cartilage, retina, and adult gall bladder.

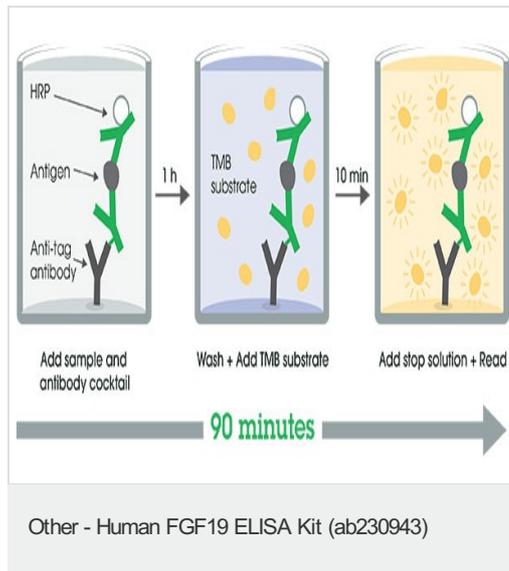
Sequence similarities

Belongs to the heparin-binding growth factors family.

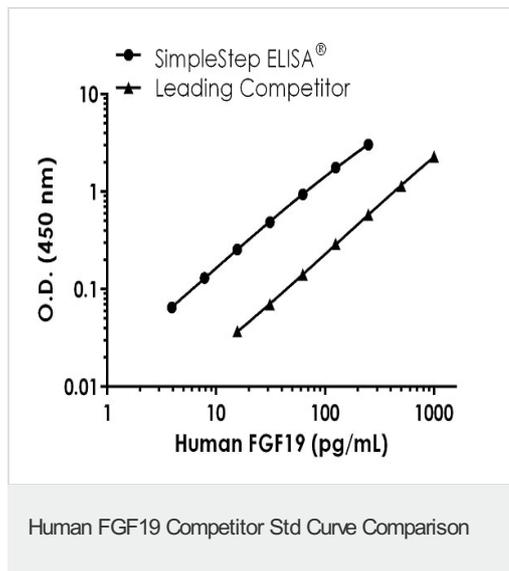
Cellular localization

Secreted.

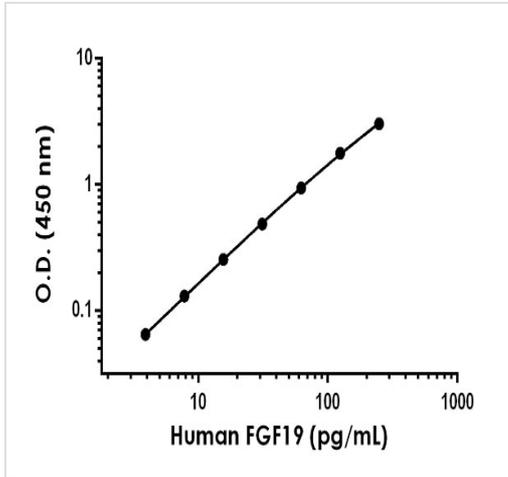
Images



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.

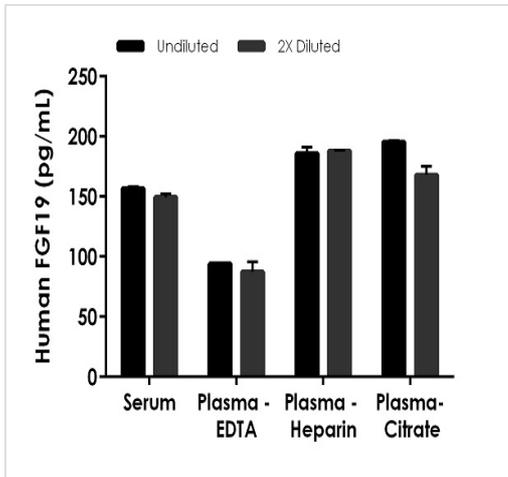


Standard curve comparison between human FGF19 SimpleStep ELISA® kit and traditional ELISA kit from leading competitor. SimpleStep ELISA kit shows increased sensitivity.



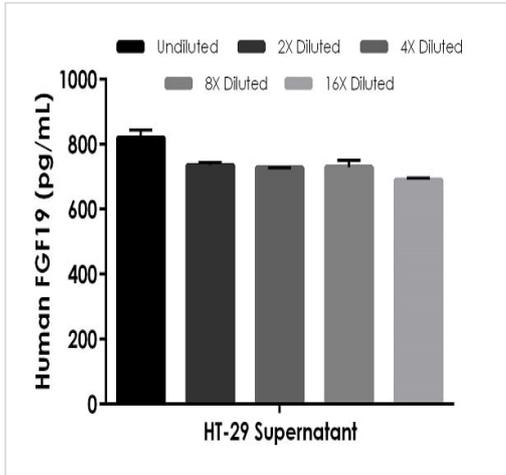
Background-subtracted data values (mean +/- SD) are graphed.

Example of human FGF19 standard curve in Sample Diluent NS



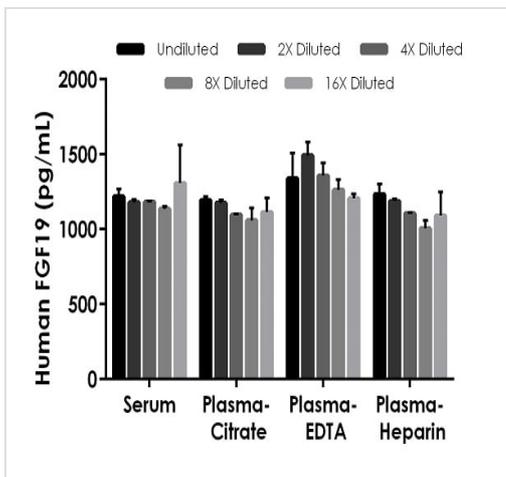
Interpolated concentrations of native FGF19 in human serum, and plasma samples

The concentrations of FGF19 were measured in duplicates, interpolated from the FGF19 standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 12.5%, plasma (EDTA) 12.5%, plasma (heparin) 12.5% and plasma (citrate) 12.5%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean FGF19 concentration was determined to be 153 pg/mL in serum , 91 pg/mL in plasma (EDTA), 187 pg/mL in plasma (heparin), and 182 pg/mL in plasma (citrate).



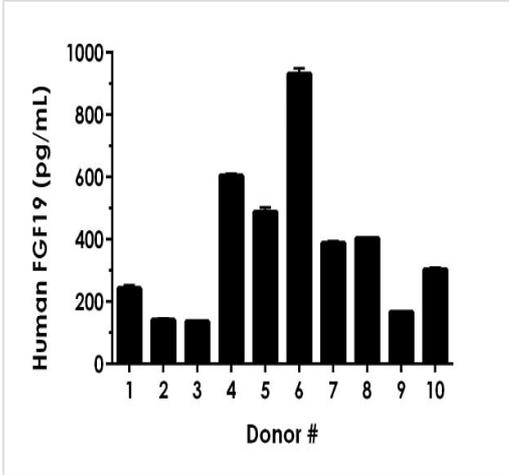
Interpolated concentrations of spike FGF19 in human serum, and plasma samples

The concentrations of FGF19 were measured in duplicates, interpolated from the FGF19 standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 12.5%, plasma (citrate) 12.5%, plasma (EDTA) 12.5% and plasma (heparin) 12.5%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2).



Interpolated concentrations of native FGF19 in HT-29 cell culture supernatant

The concentrations of FGF19 were measured in duplicates, interpolated from the FGF19 standard curves and corrected for sample dilution. Undiluted samples are as follows: HT-29 cell culture supernatant 25%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean FGF19 concentration was determined to be 741 pg/mL in HT-29 cell culture supernatant.



Interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean FGF19 concentration was determined to be 381 pg/mL with a range of 136 – 944 pg/mL.

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

Powered by recombinant antibodies

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Sandwich ELISA - Human FGF19 ELISA Kit
(ab230943)

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

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