

Product datasheet

Human FLRG ELISA Kit ab245715

Recombinant SimpleStep ELISA

[8 Images](#)

Overview

Product name Human FLRG ELISA Kit

Detection method Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%
serum	8			4.7%

Inter-assay

Sample	n	Mean	SD	CV%
serum	3			6.4%

Sample type

Cell culture supernatant, Milk, Urine, Serum, Hep Plasma, EDTA Plasma

Assay type

Sandwich (quantitative)

Sensitivity

8.2 pg/ml

Range

31.25 pg/ml - 2000 pg/ml

Recovery

Sample specific recovery

Sample type	Average %	Range
Cell culture supernatant	107	104% - 111%
Milk	103	98% - 109%
Urine	98	94% - 109%
Serum	106	105% - 109%
Hep Plasma	101	99% - 105%
EDTA Plasma	104	102% - 106%

Assay time	1h 30m
Assay duration	One step assay
Species reactivity	Reacts with: Human Does not react with: Cow
Product overview	Human FLRG ELISA Kit (ab245715) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of FLRG protein in edta plasma, hep plasma, milk, serum, urine, and cell culture supernatant. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human FLRG with 8.2 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 FLRG Capture Antibody	1 x 600µl
10X Human FLRG Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent 5BI	1 x 6ml
Human FLRG 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

Components

1 x 96 tests

TMB Development Solution

1 x 12ml

Function

Isoform 1 or the secreted form is a binding and antagonizing protein for members of the TGF-beta family, such as activin, BMP2 and MSTN. Inhibits activin A-, activin B-, BMP2- and MSDT-induced cellular signaling; more effective on activin A than on activin B. Involved in bone formation; inhibits osteoclast differentiation. Involved in hematopoiesis; involved in differentiation of hemopoietic progenitor cells, increases hematopoietic cell adhesion to fibronectin and seems to contribute to the adhesion of hematopoietic precursor cells to the bone marrow stroma. Isoform 2 or the nuclear form is probably involved in transcriptional regulation via interaction with MLLT10.

Tissue specificity

Expressed in a wide range of tissues.

Involvement in disease

Note=A chromosomal aberration involving FSTL3 is found in a case of B-cell chronic lymphocytic leukemia. Translocation t(11;19)(q13;p13) with CCDN1.

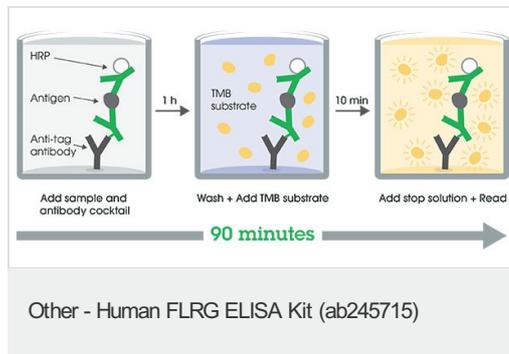
Sequence similarities

Contains 2 follistatin-like domains.
Contains 2 Kazal-like domains.
Contains 1 TB (TGF-beta binding) domain.

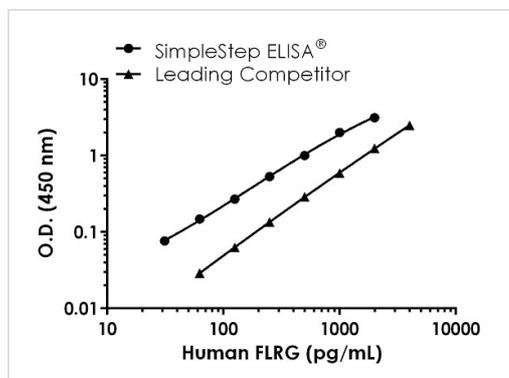
Cellular localization

Secreted and Nucleus. Although alternative initiation has been demonstrated and resulted in different localization, the major source of nuclear FSTL3 appears not to depend on translation initiation at Met-27 according to.

Images

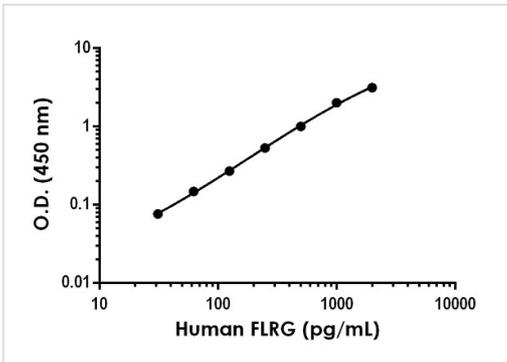


SimpleStep ELISA technology allows the formation of the antibody-antigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.



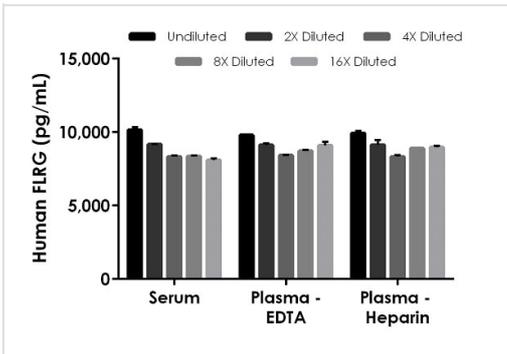
Standard Curve comparison between human FLRG SimpleStep ELISA kit and traditional ELISA kit from leading competitor. SimpleStep ELISA kit shows increased sensitivity.

Example of human FLRG standard curve in Sample Diluent NS.



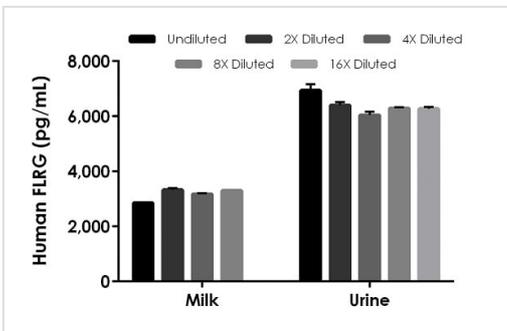
Example of human FLRG standard curve in Sample Diluent NS.

The FLRG 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.



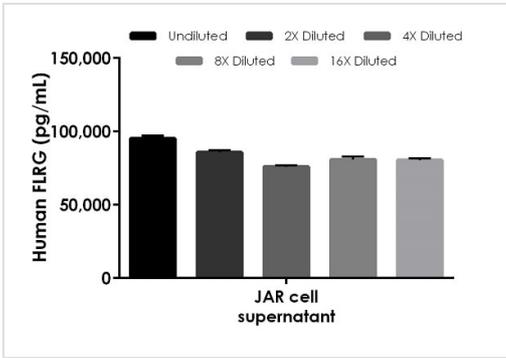
Interpolated concentrations of native FLRG in human serum and plasma samples.

The concentrations of FLRG were measured in duplicates, interpolated from the FLRG standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 15%, plasma (EDTA) 15%, and plasma (heparin) 15%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean FLRG concentration was determined to be 8,804 pg/mL in serum, 8,996 pg/mL in plasma (EDTA) and 9,092 pg/mL in plasma (heparin).



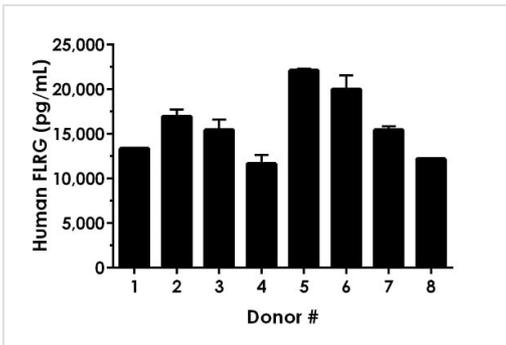
Interpolated concentrations of native FLRG in human milk and urine samples.

The concentrations of FLRG were measured in duplicates, interpolated from the FLRG standard curves and corrected for sample dilution. Undiluted samples are as follows: milk 15% and urine 15%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean FLRG concentration was determined to be 3,167 pg/mL in milk and 6,392 pg/mL in urine.



Interpolated concentrations of native FLRG in JAR cell supernatant samples.

The concentrations of FLRG were measured in duplicates, interpolated from the FLRG standard curves and corrected for sample dilution. Undiluted samples are as follows: JAR cell supernatants 1%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean FLRG concentration was determined to be 83,631 pg/mL in JAR cell supernatant.



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 FLRG concentration was determined to be 15,897 pg/mL with a range of 13,362 - 21,062 pg/mL.

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 FLRG ELISA Kit (ab245715)

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

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