

# Human Flt-3 ligand ELISA Kit ab254507

Recombinant SimpleStep ELISA<sup>®</sup>

[10 Images](#)

### Overview

**Product name** Human Flt-3 ligand ELISA Kit

**Detection method** Colorimetric

#### Precision

Intra-assay

Sample	n	Mean	SD	CV%
Serum	8			4.1%

Inter-assay

Sample	n	Mean	SD	CV%
Serum	3			4.2%

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

**Assay type** Sandwich (quantitative)

**Sensitivity** 2 pg/ml

**Range** 4.7 pg/ml - 300 pg/ml

#### Recovery

Sample specific recovery

Sample type	Average %	Range
Cell culture supernatant	95	94% - 97%
Serum	99	93% - 103%
Hep Plasma	98	93% - 101%
EDTA Plasma	94	87% - 97%
Cit plasma	97	93% - 101%

**Assay time** 1h 30m

**Assay duration** One step assay

**Species reactivity****Reacts with:** Human**Product overview**

Human Flt-3 ligand ELISA Kit (ab254507) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of Flt-3 ligand protein in cell culture supernatant, cit plasma, edta plasma, hep plasma, and serum. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human Flt-3 ligand with 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.

**Notes**

Flt-3 Ligand binds to and activates Flt-3. Flt-3 Ligand works synergistically with other CSFs and interleukins to stimulate growth and differentiation of early hematopoietic cells. The predominant form of Flt-3 Ligand is the biologically active transmembrane form which is proteolytically cleaved to generate a soluble form that is also biologically active. Alternative spliced secreted soluble variant of Flt-3 Ligand has also been identified.

**Tested applications****Suitable for:** Sandwich ELISA**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	10 x 96 tests	1 x 384 tests
10X Human Flt-3 ligand Capture Antibody	1 x 600µl	10 x 600µl	1 x 600µl
10X Human Flt-3 ligand Detector Antibody	1 x 600µl	10 x 600µl	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml	1 x 200ml	1 x 20ml
384 well CaptSure™ microplates	0 x 0 unit	0 x 0 unit	1 unit
Antibody Diluent 4BI	1 x 6ml	10 x 6ml	1 x 6ml
Human Flt-3 ligand Lyophilized Recombinant Protein	2 vials	2 x 10 vials	2 vials
Plate Seal	1 unit	1 x 10 units	1 unit

Components	1 x 96 tests	10 x 96 tests	1 x 384 tests
Sample Diluent NS (ab193972)	1 x 50ml	2 x 250ml	1 x 250ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit	1 x 10 units	0 x 0 unit
Stop Solution	1 x 12ml	1 x 120ml	2 x 12ml
TMB Development Solution	1 x 12ml	1 x 120ml	2 x 12ml

**Function** Stimulates the proliferation of early hematopoietic cells by activating FLT3. Synergizes well with a number of other colony stimulating factors and interleukins.

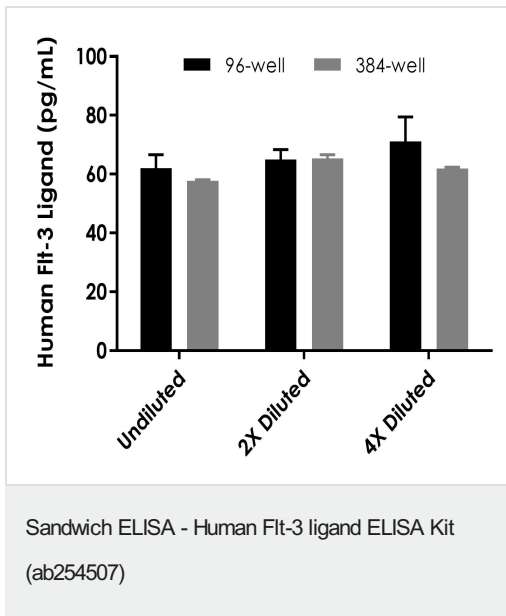
**Cellular localization** Secreted and Cell membrane.

## Applications

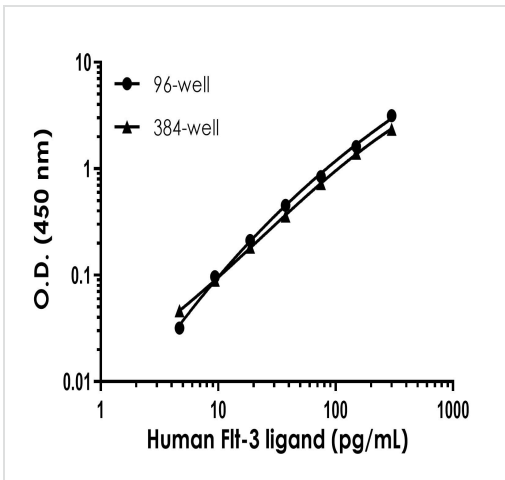
**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab254507 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
<b>Sandwich ELISA</b>		Use at an assay dependent concentration.

## Images

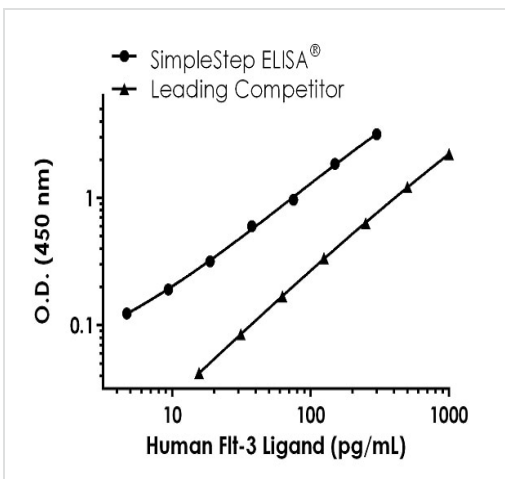


Interpolated concentration of native Flt-3 Ligand was measured in duplicate at different sample concentrations in 96-well vs. 384-well plates. Undiluted samples are 50% human serum. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). Sample dilutions are made in Sample Diluent NS.



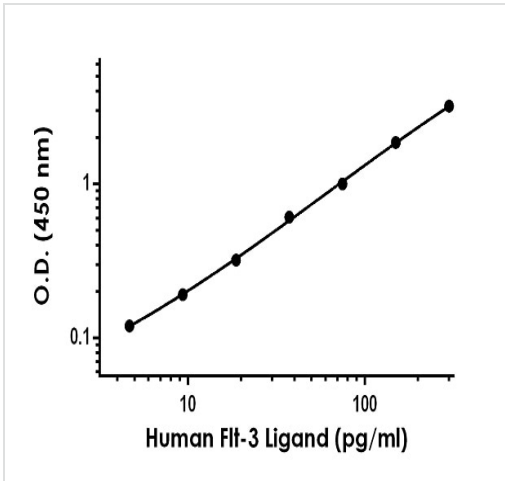
Example of human Flt-3 Ligand standard curve in 96-well vs. 384-well plate. Background-subtracted data values (mean +/- SD) are graphed.

Sandwich ELISA - Human Flt-3 ligand ELISA Kit (ab254507)



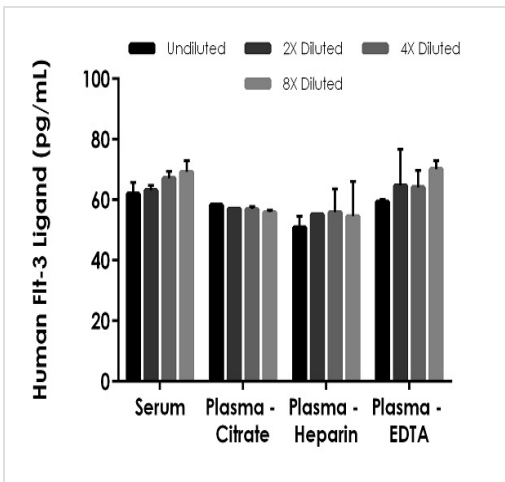
Standard Curve comparison between human Flt-3 Ligand SimpleStep ELISA kit and traditional ELISA kit from leading competitor. SimpleStep ELISA kit shows increased sensitivity.

Human Flt-3 Ligand standard curve comparison



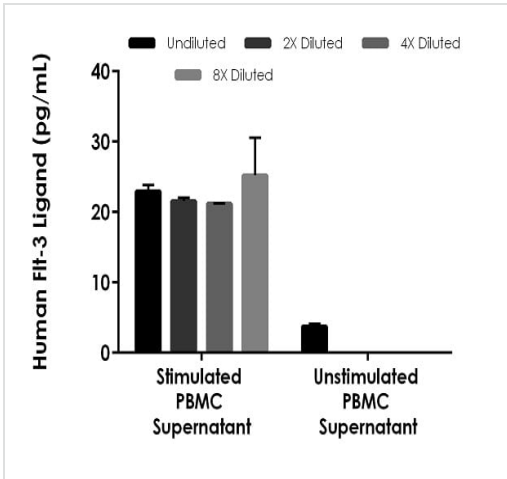
Example of human Flt-3 Ligand standard curve in Sample Diluent NS.

The Flt-3 Ligand 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 Flt-3 Ligand in human serum and plasma samples.

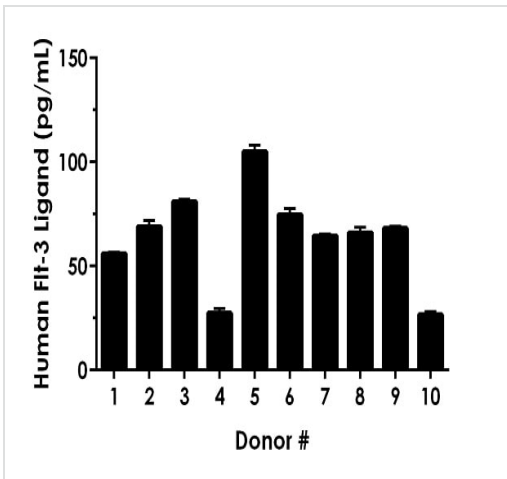
The concentrations of Flt-3 Ligand were measured in duplicates, interpolated from the Flt-3 Ligand standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 50%, plasma (citrate) 50%, plasma (heparin) 50%, and plasma (EDTA) 50%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean Flt-3 Ligand concentration was determined to be 65.35 pg/mL in neat serum, 57.01 pg/mL in neat plasma (citrate), 54.11 pg/mL in neat plasma (heparin), and 64.57 pg/mL in neat plasma (EDTA).



Interpolated concentrations of native Flt-3 Ligand in human PBMC cell culture supernatant samples.

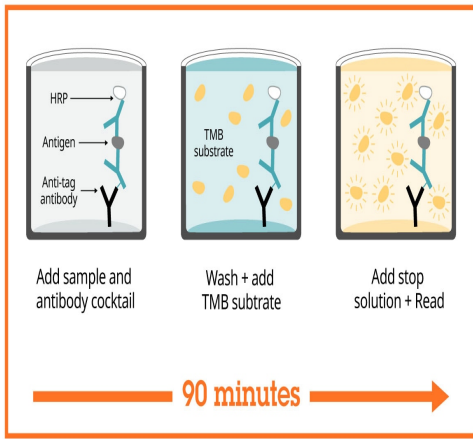
Human PBMC were cultured in the presence (stimulated) or absence (unstimulated) of 1.5% PHA-M.

Human peripheral blood mononuclear cells (PBMC) were cultured in the presence (stimulated) or absence (unstimulated) of 1.5% PHA-M for 36 hours. The concentrations of Flt-3 Ligand were measured in duplicates, interpolated from the Flt-3 Ligand standard curves and corrected for sample dilution. Undiluted samples are as follows: stimulated PBMC supernatant 100% and unstimulated PBMC supernatant 100%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean Flt-3 Ligand concentration was determined to be 22.72 pg/mL in neat PHA-M stimulated PBMC cell culture supernatant, 3.742 pg/mL in neat unstimulated PBMC cell culture supernatant, and undetectable in naïve cell culture media (data not shown).



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

Interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean Flt-3 Ligand concentration was determined to be 63.87 pg/mL with a range of 26.63 – 105.1 pg/mL.



Sandwich ELISA - Human Flt-3 ligand ELISA Kit  
(ab254507)

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 Flt-3 ligand ELISA Kit  
(ab254507)

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 Flt-3 ligand ELISA Kit  
(ab254507)

To learn more about the advantages of SimpleStep ELISA<sup>®</sup> kits see [here](#).

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

### **Our Abpromise to you: Quality guaranteed and expert technical support**

---

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
  
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

### **Terms and conditions**

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors