

Human VEGF R3 ELISA Kit ab252350

Recombinant SimpleStep ELISA

[6 Images](#)

Overview

Product name Human VEGF R3 ELISA Kit

Detection method Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%
Serum	8			2.3%

Inter-assay

Sample	n	Mean	SD	CV%
Serum	3			3%

Sample type

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

Assay type

Sandwich (quantitative)

Sensitivity

89.6 pg/ml

Range

218.8 pg/ml - 14000 pg/ml

Recovery

Sample specific recovery

Sample type	Average %	Range
Serum	96	88% - 101%
Cell culture media	103	98% - 105%
Hep Plasma	106	104% - 107%
EDTA Plasma	96	80% - 106%
Cit plasma	91	82% - 106%

Assay time

1h 30m

Assay duration

One step assay

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

Human VEGF R3 ELISA Kit (ab252350) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of VEGF R3 protein in cell culture media, cit plasma, edta plasma, hep plasma, and serum. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human VEGF R3 with 89.6 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 VEGF R3 Capture Antibody	1 x 600µl
10X Human VEGF R3 Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent 4BI	1 x 6ml
Human VEGF R3 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

Receptor for VEGFC. Has a tyrosine-protein kinase activity.

Tissue specificity

Placenta, lung, heart, and kidney, does not seem to be expressed in pancreas and brain.

Involvement in disease

Defects in FLT4 are the cause of lymphedema hereditary type 1A (LMPH1A) [MIM:153100]; also known as Nonne-Milroy lymphedema or Milroy disease. Hereditary lymphedema is a chronic disabling condition which results in swelling of the extremities due to altered lymphatic flow. Patients with lymphedema suffer from recurrent local infections and physical impairment. Note=Defects in FLT4 are found in juvenile hemangioma. Juvenile hemangiomas are the most common tumors of infancy, occurring as many as 10% of all births. These benign vascular lesions enlarge rapidly during the first year of life by hyperplasia of endothelial cells and attendant pericytes, and then spontaneously involute over a period of years, leaving loose fibrofatty tissue.

Sequence similarities

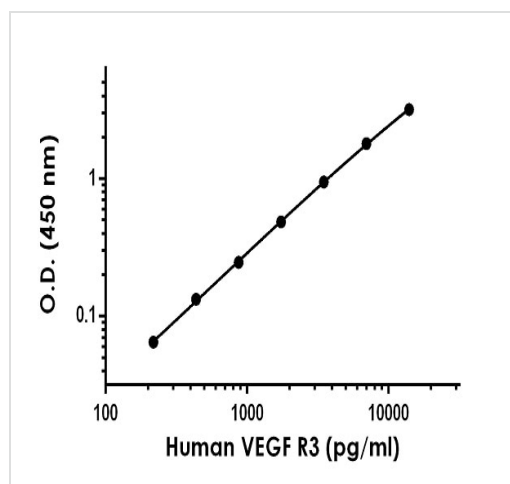
Belongs to the protein kinase superfamily. Tyr protein kinase family. CSF-1/PDGF receptor subfamily.

Contains 7 Ig-like C2-type (immunoglobulin-like) domains.

Contains 1 protein kinase domain.

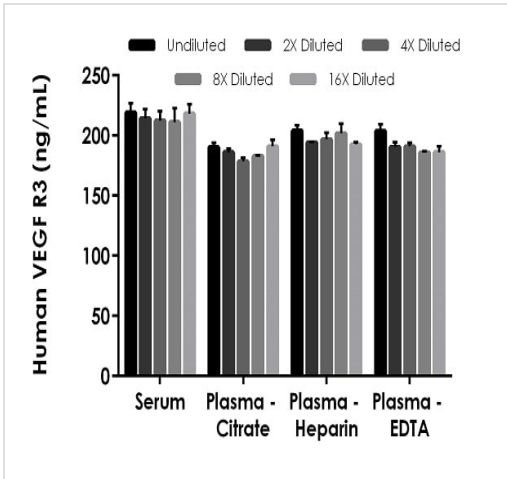
Cellular localization

Membrane.

Images

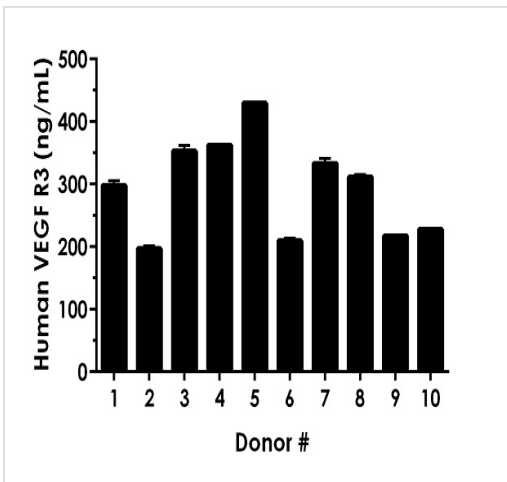
The VEGF R3 standard curve was prepared as described in Section 10. Raw data values are shown in the table. Background-subtracted data values (mean \pm SD) are graphed.

Example of human VEGF R3 standard curve in Sample Diluent NS.



Interpolated concentrations of native VEGF R3 in human serum and plasma samples.

The concentrations of VEGF R3 were measured in duplicates, interpolated from the VEGF R3 standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 5%, plasma (citrate) 5%, plasma (heparin) 5%, and plasma (EDTA) 5%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean VEGF R3 concentration was determined to be 215.0 ng/mL in neat serum, 185.8 ng/mL in neat plasma (citrate), 197.9 ng/mL in neat plasma (heparin), and 191.5 ng/mL in neat plasma (EDTA).



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

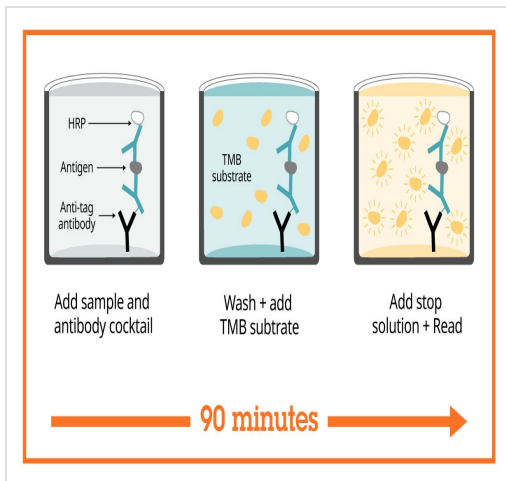
Interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean VEGF R3 concentration was determined to be 294.2 ng/mL with a range of 197.4 – 429.6 ng/mL.

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 VEGF R3 ELISA Kit (ab252350)

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



Sandwich ELISA - Human VEGF R3 ELISA Kit
(ab252350)

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.

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 VEGF R3 ELISA Kit
(ab252350)

To learn more about the advantages of SimpleStep ELISA® 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