

Mouse VEGFR2 ELISA Kit ab245725

Recombinant SimpleStep ELISA

7 Images

Overview

Product name Mouse VEGFR2 ELISA Kit

Detection method Colorimetric

Precision Intra-assay

Sample	n	Mean	SD	CV%
serum	5			6.4%

Inter-assay

Sample	n	Mean	SD	CV%
serum	3			6.9%

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

Assay type Sandwich (quantitative)

Sensitivity 28.8 pg/ml

Range 78.13 pg/ml - 5000 pg/ml

Recovery Sample specific recovery

Sample type	Average %	Range
Cell culture supernatant	120	113% - 124%
Serum	106	102% - 110%
Hep Plasma	101	90% - 107%
EDTA Plasma	101	99% - 102%
Cit plasma	112	106% - 117%

Assay time 1h 30m

Assay duration One step assay

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

Mouse VEGFR2 ELISA Kit (ab245725) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of VEGFR2 protein in cell culture supernatant, cit plasma, edta plasma, hep plasma, and serum. It uses our proprietary SimpleStep ELISA® technology. Quantitate Mouse VEGFR2 with 28.8 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)

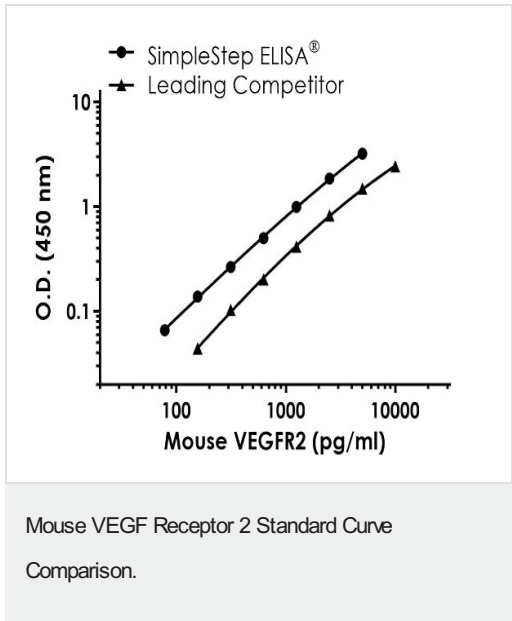
Properties**Storage instructions**

Store at +4°C. Please refer to protocols.

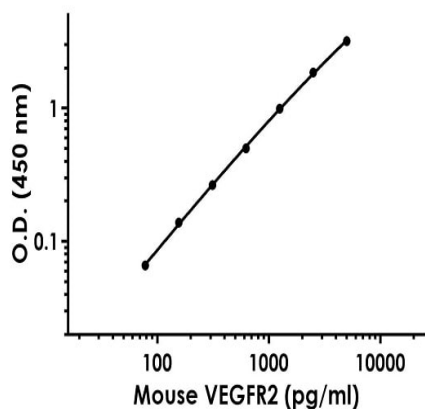
Components	1 x 96 tests
10X Mouse VEGFR2 Capture Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent CPR2	1 x 6ml
Mouse VEGFR2 Detector Antibody (Lyophilized)	1 vial
Mouse VEGFR2 Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent 50BS	1 x 20ml
Sample Diluent NS (ab193972)	1 x 12ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

Function	Receptor for VEGF or VEGFC. Has a tyrosine-protein kinase activity. The VEGF-kinase ligand/receptor signaling system plays a key role in vascular development and regulation of vascular permeability. In case of HIV-1 infection, the interaction with extracellular viral Tat protein seems to enhance angiogenesis in Kaposi's sarcoma lesions.
Involvement in disease	Defects in KDR are associated with susceptibility to hemangioma capillary infantile (HCI) [MIM:602089]. HCI are benign, highly proliferative lesions involving aberrant localized growth of capillary endothelium. They are the most common tumor of infancy, occurring in up to 10% of all births. Hemangiomas tend to appear shortly after birth and show rapid neonatal growth for up to 12 months characterized by endothelial hypercellularity and increased numbers of mast cells. This phase is followed by slow involution at a rate of about 10% per year and replacement by fibrofatty stroma.
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.
Post-translational modifications	Phosphorylated. Dephosphorylated by PTPRB. Dephosphorylated by PTPRJ at Tyr-951, Tyr-996, Tyr-1054, Tyr-1059, Tyr-1175 and Tyr-1214.
Cellular localization	Membrane.

Images

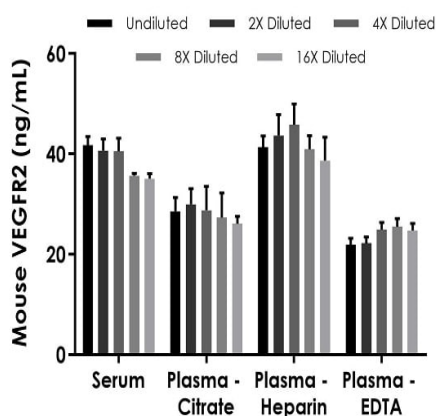


Standard Curve comparison between mouse VEGF Receptor 2 SimpleStep ELISA kit and traditional ELISA kit from leading competitor. SimpleStep ELISA kit shows increased sensitivity.



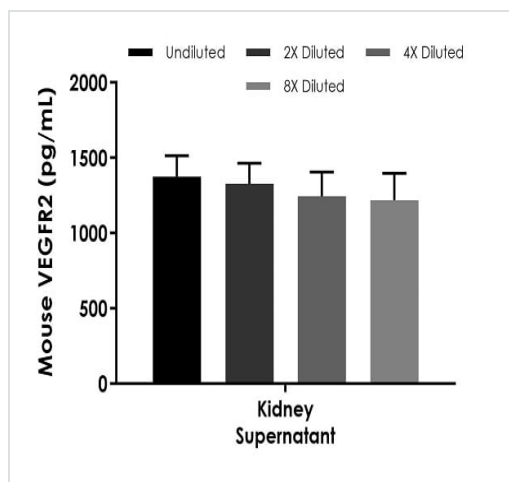
Example of mouse VEGF Receptor 2 standard curve in Sample Diluent 50BS.

The VEGF Receptor 2 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.



Interpolated concentrations of native VEGF Receptor 2 in mouse serum and plasma samples.

The concentrations of VEGF Receptor 2 were measured in duplicates, interpolated from the VEGF Receptor 2 standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 10%, plasma (citrate) 10%, plasma (heparin) 10%, and plasma (EDTA) 10%. The interpolated dilution factor corrected values are plotted (mean \pm SD, $n=2$). The mean VEGF Receptor 2 concentration was determined to be 38.9 ng/mL in serum, 27.9 ng/mL in plasma (citrate), 42.1 ng/mL in plasma (heparin), and 24.1 ng/mL in plasma (EDTA).



Interpolated concentrations of native VEGF Receptor 2 in mouse kidney tissue culture supernatant samples.

The concentrations of VEGF Receptor 2 were measured in duplicates, interpolated from the VEGF Receptor 2 standard curves and corrected for sample dilution. Undiluted samples are as follows: kidney supernatant 50%. The interpolated dilution factor corrected values are plotted (mean \pm SD, $n=2$). The mean VEGF Receptor 2 concentration was determined to be 1,291.7 pg/mL in mouse kidney supernatant.

Powered by
recombinant antibodies

Research with confidence
Consistent and reproducible results

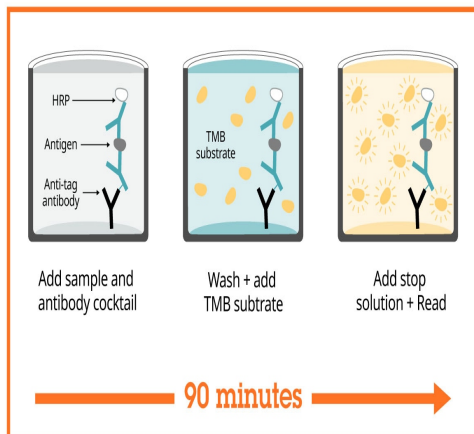
Long-term and scalable supply
Recombinant technology

Success from the first experiment
Confirmed specificity

Ethical standards compliant
Animal-free production

Sandwich ELISA - Mouse VEGF Receptor 2 ELISA
Kit (ab245725)

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



Sandwich ELISA - Mouse VEGFR2 ELISA Kit
(ab245725)

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 - Mouse VEGFR2 ELISA Kit
(ab245725)

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