

Mouse VEGF ELISA Kit ab209882

リコンビナント SimpleStep ELISA®

★★★★★ 1 Abreviews 11 References 画像数 7

製品の概要

製品名	Mouse VEGF ELISA Kit				
検出方法	Colorimetric				
再現性	Intra-Assay (同時再現性)				
	サンプル	N	平均値	SD	CV%
	Overall	5			5.6%
	Inter-Assay (日差再現性)				
	サンプル	N	平均値	SD	CV%
	Overall	3			7.9%
サンプルの種類	Cell culture supernatant, Cell culture extracts, Tissue Extracts				
アッセイタイプ	Sandwich (quantitative)				
検出感度	0.3 pg/ml				
検出範囲	5.8 pg/ml - 370 pg/ml				
添加回収試験	特定サンプルでの回収試験				
	サンプルの種類		平均 %	測定範囲	
	Cell culture media		109.6	102.9% - 117.1%	
全工程の試験時間	1h 30m				
ステップ	One step assay				
種交差性	交差種: Mouse				
製品の概要	Mouse VEGF ELISA Kit (ab209882) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of VEGF protein in cell culture extracts, cell culture supernatant, and tissue extracts. It uses our proprietary SimpleStep ELISA® technology. Quantitate Mouse VEGF with 0.3 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.

特記事項

VEGF is a secreted growth factor of PDGF family active in angiogenesis, vasculogenesis and endothelial cell growth both in fetus and adult. Alternative splicing produces isoforms including 120, 164 and 188 amino acid long forms in mouse. VEGF induces endothelial cell proliferation, promotes cell migration, inhibits apoptosis and induces permeabilization of blood vessels. VEGF dimers bind to the FLT1/VEGFR1 and KDR/VEGFR2 receptors, induce their homodimerization and autophosphorylation.

Abcam has not and does not intend to apply for the REACH Authorisation of customers' uses of products that contain European Authorisation list (Annex XIV) substances.

It is the responsibility of our customers to check the necessity of application of REACH Authorisation, and any other relevant authorisations, for their intended uses.

試験プラットフォーム

Microplate (12 x 8 well strips)

製品の特性

保存方法

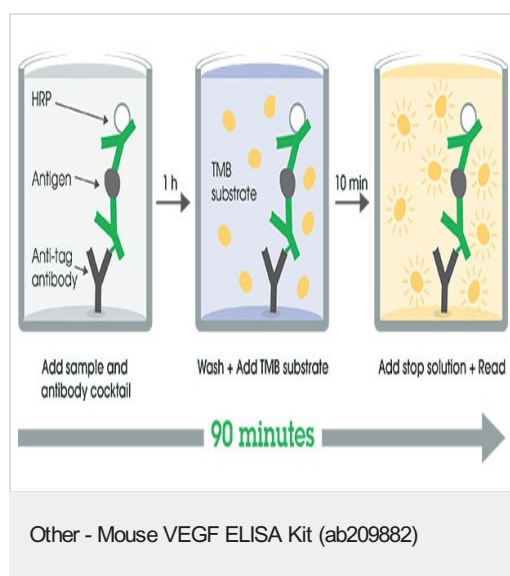
Store at +4°C. Please refer to protocols.

内容	1 x 96 tests	1 x 96 tests
10X Mouse VEGF Capture Antibody	1 x 600µl	1 x 600µl
10X Mouse VEGF Detector Antibody	1 x 600µl	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml	1 x 20ml
50X Cell Extraction Enhancer Solution (ab193971)	1 x 1ml	1 x 1ml
5X Cell Extraction Buffer PTR (ab193970)	1 x 10ml	1 x 10ml
Antibody Diluent CPR2	1 x 6ml	1 x 6ml
Mouse VEGF Lyophilized Recombinant Protein	2 vials	2 vials
Plate Seals	1 unit	1 unit
Sample Diluent NS (ab193972)	1 x 50ml	1 x 50ml

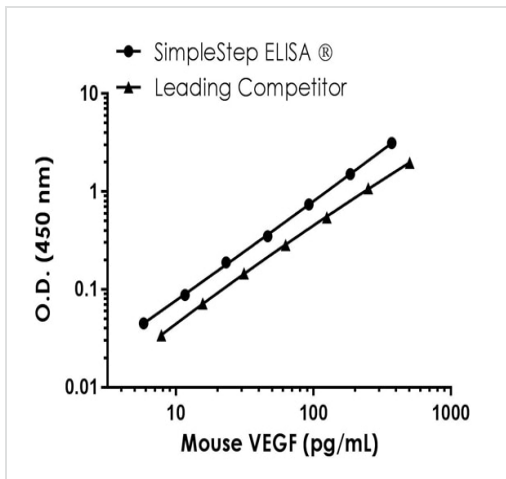
内容	1 x 96 tests	1 x 96 tests
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit	1 unit
Stop Solution	1 x 12ml	1 x 12ml
TMB Development Solution	1 x 12ml	1 x 12ml

機能	Growth factor active in angiogenesis, vasculogenesis and endothelial cell growth. Induces endothelial cell proliferation, promotes cell migration, inhibits apoptosis and induces permeabilization of blood vessels. Binds to the FLT1/VEGFR1 and KDR/VEGFR2 receptors, heparan sulfate and heparin. NRP1/Neuropilin-1 binds isoforms VEGF-165 and VEGF-145. Isoform VEGF165B binds to KDR but does not activate downstream signaling pathways, does not activate angiogenesis and inhibits tumor growth.
組織特異性	Isoform VEGF189, isoform VEGF165 and isoform VEGF121 are widely expressed. Isoform VEGF206 and isoform VEGF145 are not widely expressed.
関連疾患	Defects in VEGFA are a cause of susceptibility to microvascular complications of diabetes type 1 (MVCD1) [MIM:603933]. These are pathological conditions that develop in numerous tissues and organs as a consequence of diabetes mellitus. They include diabetic retinopathy, diabetic nephropathy leading to end-stage renal disease, and diabetic neuropathy. Diabetic retinopathy remains the major cause of new-onset blindness among diabetic adults. It is characterized by vascular permeability and increased tissue ischemia and angiogenesis.
配列類似性	Belongs to the PDGF/VEGF growth factor family.
細胞内局在	Secreted. VEGF121 is acidic and freely secreted. VEGF165 is more basic, has heparin-binding properties and, although a significant proportion remains cell-associated, most is freely secreted. VEGF189 is very basic, it is cell-associated after secretion and is bound avidly by heparin and the extracellular matrix, although it may be released as a soluble form by heparin, heparinase or plasmin.

画像

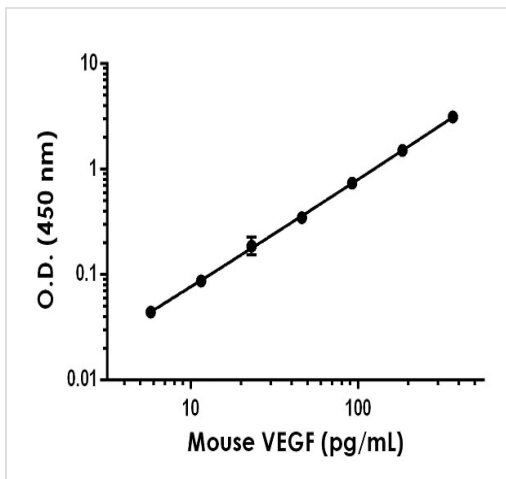


SimpleStep ELISA technology allows the formation of the antibody-antigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.



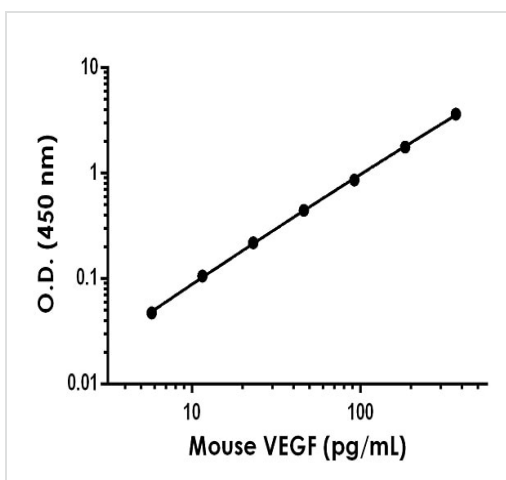
Mouse VEGF standard curve comparison data.

Standard curve comparison between mouse VEGF SimpleStep ELISA[®] kit and traditional ELISA kit from leading competitor. SimpleStep ELISA kit shows a 9-fold increase in sensitivity.



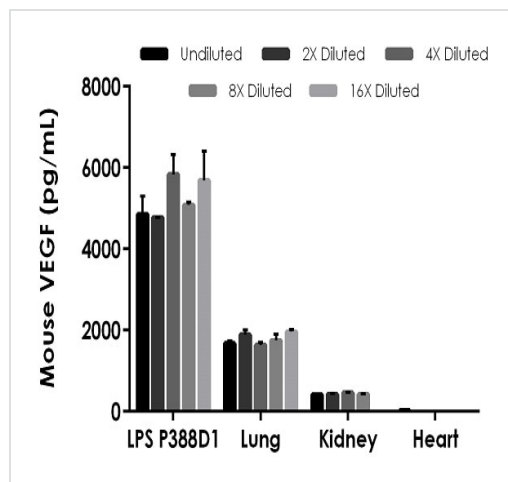
Example of mouse VEGF standard curve in Sample Diluent NS

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



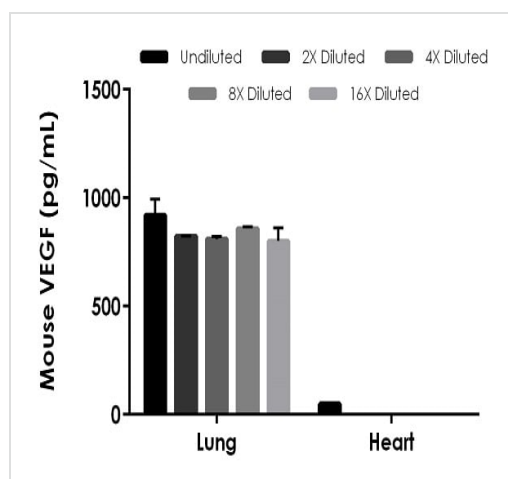
Example of mouse VEGF standard curve in 1X Cell Extraction Buffer PTR

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



Interpolated concentrations of native VEGF in Mouse cell culture supernatant samples

The concentrations of VEGF were measured in duplicates, interpolated from the VEGFA standard curves and corrected for sample dilution. Undiluted samples are as follows: 5 µg/mL LPS-treated P388D1 Day 6 supernatant 7.5%, lung day 5 supernatant 15%, kidney day 5 supernatant 30%, heart day 5 supernatant 30%. The interpolated dilution factor corrected values are plotted (mean \pm SD, n=2). The mean VEGF concentration was determined to be 5,249 pg/mL in LPS P388D1 supernatant, 1,785 pg/mL in lung supernatant, 430 pg/mL in kidney supernatant and 30 pg/mL in heart supernatant samples.



Interpolated concentrations of native VEGF in mouse lung extract sample based on a 500 µg/mL extract load and in mouse heart extract sample based on a 1,000 µg/mL extract load

The concentrations of VEGF were measured in duplicate and interpolated from the VEGF standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean \pm SD, n=2). The mean VEGFA concentration was determined to be 842 pg/mL in lung sample and 50 pg/mL in heart sample.

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Sandwich ELISA - Mouse VEGF ELISA Kit
(ab209882)

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

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