# abcam

## Product datasheet

# Mouse VEGF-B ELISA Kit ab213897

3 References 1 Image

Overview

Product name Mouse VEGF-B ELISA Kit

**Detection method** Colorimetric

Precision

Sample	n	Mean	SD	CV%
1	16	70pg/ml	4.13	= 5%
2	16	247pg/ml	20.17	= 7.5%
3	16	978pg/ml	48.9	= 5%

Inter-assay

Intra-assav

Sample	n	Mean	SD	CV%
1	24	69pg/ml	4.83	= 7%
2	24	246pg/ml	20.17	= 8.2%
3	24	1037pg/ml	59.1	= 5.7%

Sample type Cell culture supernatant, Serum, Hep Plasma

Assay type Sandwich (quantitative)

**Sensitivity** < 2 pg/ml

**Range** 31.2 pg/ml - 2000 pg/ml

Assay time 3h 30m

Assay duration Multiple steps standard assay

Species reactivity Reacts with: Mouse

Product overview The Mouse VEGF-B Enzyme-Linked Immunosorbent Assay (ELISA) kit (ab213897) is designed

for the quantitative detection of Mouse VEGF-B in cell culture supernatants, serum and plasma

(heparin).

The ELISA kit is based on standard sandwich enzyme-linked immunosorbent assay technology. A

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monoclonal antibody from rat specific for VEGF-B has been precoated onto 96-well plates. Standards (Expression system for standard: sf21; Immunogen sequence: Q20-A207 and Q20-R148) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for VEGF-B is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with PBS or TBS buffer. HRP substrate TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the Mouse VEGF-B amount of sample captured in plate.

**Notes** 

Vascular endothelial growth factor B also known as VEGF-B is a protein that, in humans, is encoded by the VEGF-B gene. VEGF-B is a growth factor that belongs to the vascular endothelial growth factor family, of which VEGF-A is the best-known member. In contrast to VEGF-A, VEGF-B plays a less pronounced role in the vascular system: Whereas VEGF-A is important for the formation of blood vessels, such as during development or in pathological conditions, VEGF-B seems to play a role only in the maintenance of newly formed blood vessels during pathological conditions. It also plays an important role on several types of neurons. It is important for the protection of neurons in the retina and the cerebral cortex during stroke and of motor neurons during motor neuron diseases such as amyotrophic lateral sclerosis.

**Platform** 

Pre-coated microplate (12 x 8 well strips)

#### **Properties**

#### Storage instructions

Store at -20°C. Please refer to protocols.

Components	Identifier	1 x 96 tests
ABC Diluent Buffer	Blue Cap	1 x 12ml
Adhesive Plate Seal		4 units
Antibody Diluent Buffer	Green Cap	1 x 12ml
Anti-Mouse VEGF-B coated Microplate (12 x 8 wells)		1 unit
Avidin-Biotin-Peroxidase Complex (ABC)		1 x 100µl
Biotinylated anti- Mouse VEGF-B antibody		1 x 100µl
Lyophilized recombinant Mouse VEGF-B standard		2 vials
Sample Diluent Buffer	Green Cap	1 x 30ml
TMB Color Developing Agent	Black Cap	1 x 10ml
TMB Stop Solution	Yellow Cap	1 x 10ml
Wash Buffer (25X)		1 x 20ml

**Function** 

Growth factor for endothelial cells. VEGF-B167 binds heparin and neuropilin-1 whereas the binding to neuropilin-1 of VEGF-B186 is regulated by proteolysis.

Tissue specificity

Expressed in all tissues except liver. Highest levels found in heart, skeletal muscle and pancreas.

Sequence similarities

Belongs to the PDGF/VEGF growth factor family.

Post-translational

modifications

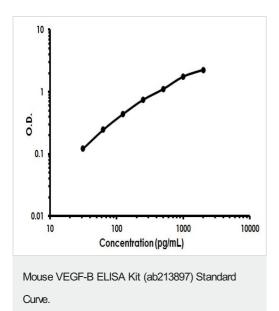
VEGF-B186 is O-glycosylated.

**Cellular localization** 

Secreted. Secreted but remains associated to cells or to the extracellular matrix unless released

by heparin.

### **Images**



Mouse VEGF-B ELISA Kit (ab213897) Standard Curve.

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