

## Product datasheet

# Human VEGF ELISA Kit ab100662

6 References 4 图像

### 概述

产品名称	人VEGF ELISA试剂盒
检测方法	Colorimetric
样品类型	Cell culture supernatant, Serum, Plasma
检测类型	Sandwich (quantitative)
灵敏度	< 10 pg/ml
范围	8.23 pg/ml - 6000 pg/ml
回收率	> 100 %

特定样本回收率

样品类型	平均%	范围
Cell culture supernatant	103.5	92% - 113%
Serum	104.4	92% - 115%
Plasma	105.7	93% - 114%

**实验步骤** Multiple steps standard assay

**种属反应性** 与反应: Human

**产品概述** Abcam's VEGF Human ELISA (Enzyme-Linked Immunosorbent Assay) kit is an *in vitro* enzyme-linked immunosorbent assay for the quantitative measurement of Human VEGF in serum, plasma and cell culture supernatants.

This assay employs an antibody specific for Human VEGF coated on a 96-well plate. Standards and samples are pipetted into the wells and VEGF present in a sample is bound to the wells by the immobilized antibody. The wells are washed and biotinylated anti-Human VEGF antibody is added. After washing away unbound biotinylated antibody, HRP-conjugated streptavidin is pipetted to the wells. The wells are again washed, a TMB substrate solution is added to the wells and color develops in proportion to the amount of VEGF bound. The Stop Solution changes the color from blue to yellow, and the intensity of the color is measured at 450 nm.

**说明** Optimization may be required with urine samples.

**经测试应用** 适用于: Sandwich ELISA

**平台** Microplate

## 性能

### 存放说明

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

组件	1 x 96 tests
20X Wash Buffer Concentrate	1 x 25ml
300X HRP-Streptavidin Concentrate	1 x 200µl
5X Assay Diluent B	1 x 15ml
Assay Diluent A	1 x 30ml
Biotinylated anti-Human VEGF	2 vials
Recombinant Human VEGF Standard	2 vials
Stop Solution	1 x 8ml
TMB One-Step Substrate Reagent	1 x 12ml
VEGF Microplate (12 x 8 wells)	1 unit

### 功能

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.

### 组织特异性

Isoform VEGF189, isoform VEGF165 and isoform VEGF121 are widely expressed. Isoform VEGF206 and isoform VEGF145 are not widely expressed.

### 疾病相关

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.

### 序列相似性

Belongs to the PDGF/VEGF growth factor family.

### 细胞定位

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.

## 应用

Our [Abpromise guarantee](#) covers the use of **ab100662** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

应用

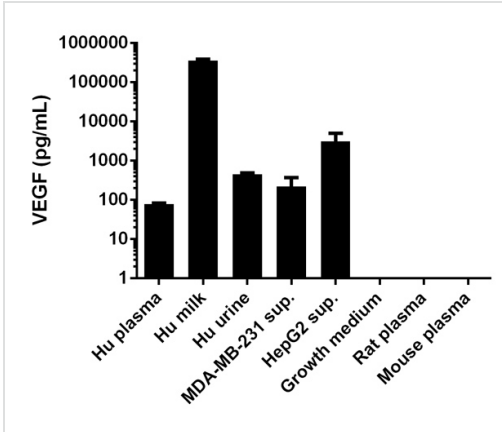
Ab评论

说明

Sandwich ELISA

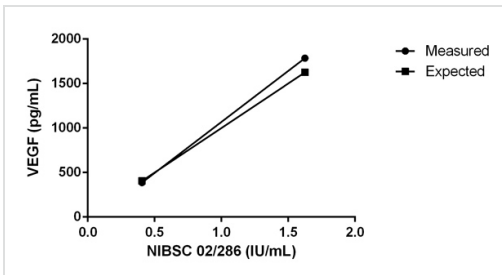
Use at an assay dependent concentration.

图片



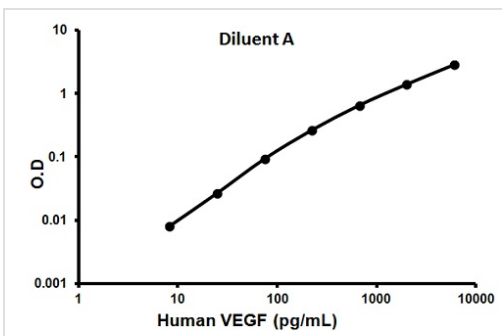
VEGF measured in biological fluids showing quantity (pg) per milliliter of sample tested

Sandwich ELISA - VEGF Hu (ab100662)



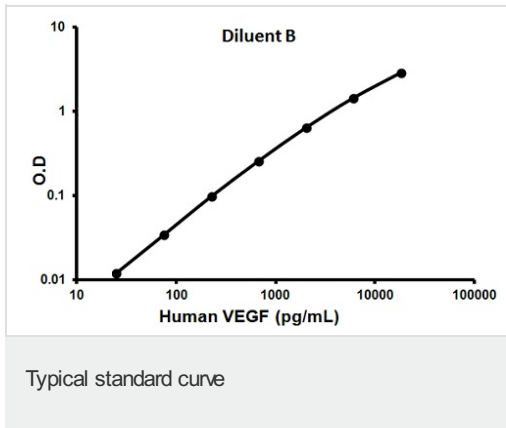
Curves showing concentrations huVEGF165 in NIBSC 02/286 using ab100662 VEGF human

Sandwich ELISA - ab100662 VEGF Human



Representative standard curve using ab100662

Typical standard curve



Representative standard curve using  
ab100662

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