

### Recombinant mouse VEGFA protein ab9954

#### 製品の詳細

製品名	Recombinant mouse VEGFA protein
精製度	> 98 % SDS-PAGE. Sterile filtered Greater than 98% pure by HPLC analyses. Endotoxin level is less than 0.1 ng per g (1EU/g).
発現系	Escherichia coli
タンパク質長	Full length protein
Animal free	No
由来	Recombinant
生物種	Mouse
配列	MAPTTEGEQK SHEVIKFMDV YQRSYCRPIE TLVDIFQEYP DEIEYIFKPS CVPLMRCAGC CNDEALECVP TSESNITMQI MRIKPHQSQH IGEMSFLQHS RCECRPKKDR TKPEKHCEPC SERRKHLFVQ DPQTCKCSCK NTDSRCKARQ LELNERTCRC DKPRR
予測される分子量	39 kDa
配列の追加情報	Recombinant mouse VEGF is a 39.0 kDa disulfide-linked homodimeric protein consisting of two 165 amino acid polypeptide chains.

#### 特性

Our **Abpromise guarantee** covers the use of **ab9954** in the following tested applications.

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

アプリケーション	Functional Studies SDS-PAGE
製品の状態	Lyophilized
備考	The biological activity of this product is determined by its mitogenic activity on human human umbilical vein endothelial cells and bovine aortic endothelial cells. Mitogenic activity was obtained for stimulation of 3H-thymidine incorporation and cell proliferation in a concentration range of 1.0-5.0 ng/ml.

## 前処理および保存

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### 保存方法および安定性

Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.

This product is an active protein and may elicit a biological response in vivo, handle with caution.

### 再構成

Reconstitute in water to a concentration of 0.1-1.0 mg/ml.

## 関連情報

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### 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.

**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

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- 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.co.jp/abpromise> or contact our technical team.

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