

## Product datasheet

# Recombinant VEGFA protein ab117230

### Overview

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<b>Product name</b>	Recombinant VEGFA protein
<b>Protein length</b>	Full length protein

### Description

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<b>Nature</b>	Recombinant
<b>Source</b>	Yeast

### Amino Acid Sequence

<b>Accession</b>	<a href="#">Q9GKR0</a>
<b>Sequence</b>	APMAEGEHKT HEVVKFMDVY QRSYCRPIET LVDIFQEYPD EIEYIFKPSC VPLMRCGGCC NDEGLECVPT AEFNITMQIM RIKPHQSQHI GEMSFLQHSK CECRPKKDKA RQENPCGPCS ERRKHLFVQD PQTCKCSCKN TDSRCKARQL ELNERTCRCD KPRR
<b>Molecular weight</b>	19 kDa
<b>Amino acids</b>	27 to 190

### Specifications

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Our [Abpromise guarantee](#) covers the use of **ab117230** in the following tested applications.

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

<b>Applications</b>	SDS-PAGE
<b>Form</b>	Lyophilised

### Preparation and Storage

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<b>Stability and Storage</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles. Constituents: 90% PBS, 10% Trehalose
<b>Reconstitution</b>	Reconstitute with sterile phosphate-buffered saline containing at least 0.1% carrier protein.

## General Info

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<b>Function</b>	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.
<b>Tissue specificity</b>	Isoform VEGF189, isoform VEGF165 and isoform VEGF121 are widely expressed. Isoform VEGF206 and isoform VEGF145 are not widely expressed.
<b>Involvement in disease</b>	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.
<b>Sequence similarities</b>	Belongs to the PDGF/VEGF growth factor family.
<b>Cellular localization</b>	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 AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

## 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
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- Response to your inquiry within 24 hours
  
- We provide support in Chinese, English, French, German, Japanese and Spanish
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- We investigate all quality concerns to ensure our products perform to the highest standards

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