

## Product datasheet

# Recombinant Pig VEGFA protein (His tag) ab224845

### Description

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<b>Product name</b>	Recombinant Pig VEGFA protein (His tag)
<b>Purity</b>	> 90 % SDS-PAGE.
<b>Expression system</b>	Escherichia coli
<b>Accession</b>	<b><u>P49151</u></b>
<b>Protein length</b>	Full length protein
<b>Animal free</b>	No
<b>Nature</b>	Recombinant
<b>Species</b>	Pig
<b>Sequence</b>	APMAEGDQKPHEVVKFMDEVYQRSYCRPIETLVDIFQEYPD EIEYIFKPSC VPLMRCGGCCNDEGLECVPTTEFNITMQIMRIKPHQGQHI GEMSFLQHMK CECRPKKDRARQENPCGPCSERRKHLFVQDPQTCKCS CKNTDSRCKARQL ELNERTCRCDKPRR
<b>Predicted molecular weight</b>	23 kDa including tags
<b>Amino acids</b>	27 to 190
<b>Tags</b>	His tag N-Terminus
<b>Additional sequence information</b>	This product is the mature full length protein from aa 27 to 190. The signal peptide is not included.

### Specifications

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Our **Abpromise guarantee** covers the use of **ab224845** in the following tested applications.

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

<b>Form</b>	Liquid
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### Preparation and Storage

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<b>Stability and Storage</b>	Shipped at 4°C. Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle. pH: 7.2 Constituents: 50% Glycerol (glycerin, glycerine), Tris buffer
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## 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.

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**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.com/abpromise> or contact our technical team.

## Terms and conditions

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