abcam

Product datasheet

Recombinant Human VEGFA protein ab55566

★★★★★ 1 Abreviews 5 References 1 Image

Description

Product name	Recombinant Human VEGFA protein
Purity	> 95 % SDS-PAGE. Proprietary purification method
Expression system	Escherichia coli
Accession	P15692-4
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	APMAEGGGQNHHEVVKFMDVYQRSYCHPIETLVDIFQEYP DEIEYIFKPS CVPLMRCGGCCNDEGLECVPTEESNITMQIMRIKPPQGQ HIGEMSFLQHN KCECRPKKDRARQENPCGPCSERRKHLFVQDPQTCKCS CKNTDSRCKARQ LELNERTCRCDKPRR
Actual molecular weight	24 kDa including tags
Amino acids	27 to 191
Tags	His tag N-Terminus
Additional sequence information	This recombinant VEGF protein comprises a 165 amino acid fragment (27-191) corresponding to the VEGF 165 isoform and is expressed in E. coli with an aminoterminal hexahistidine tag.

Specifications

Our **Abpromise guarantee** covers the use of **ab55566** in the following tested applications.

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

Applications	SDS-PAGE Western blot
Form	Liquid

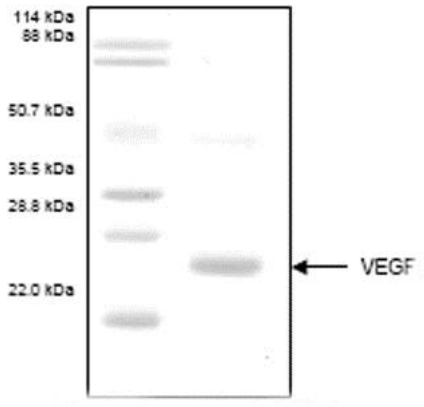
Preparation and Storage

Stability and Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles. pH: 8.00 Constituents: 0.242% Tris, 50% Glycerol

General Info

Function	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.
Tissue specificity	Isoform VEGF189, isoform VEGF165 and isoform VEGF121 are widely expressed. Isoform VEGF206 and isoform VEGF145 are not widely expressed.
Involvement in disease	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.
Sequence similarities	Belongs to the PDGF/VEGF growth factor family.
Cellular localization	Secreted. VEGF121 is acidic and freely secreted. VEGF165 is more basic, has heparin-binding properties and, although a signicant 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.

Images



ab55566 on SDS-PAGE

SDS-PAGE - Recombinant Human VEGFA protein (ab55566)

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