

Recombinant human VEGFA protein (Animal Free) ab217394

描述	
产品名称	重组人VEGFA蛋白(Animal Free)
生物活性	Determined by its ability to stimulate the proliferation of human umbilical vein endothelial cells (HUVEC). The expected ED ₅₀ for this effect is 1.0-10.0 ng/ml.
纯度	> 98 % SDS-PAGE. > 98% by HPLC analysis.
表达系统	Escherichia coli
Accession	<u>P15692-4</u>
蛋白长度	Full length protein
无动物成分	Yes
性质	Recombinant
种属	Human
序列	APMAEGGGQNHHEVVKFMDVYQRSYCHPIETLVDIFQEYPDE IEYIFKPS CVPLMRCGGCCNDEGLECVPTESNITMQIMRIKPHQGQHIG EMSFLQHN KCECRPKKDRARQENPCGPCSERRKHLFVQDPQTCKCCKNT DSRCKARQ LELNERTCRCDKPRR
预测分子量	38 kDa
氨基酸	27 to 191
额外的序列信息	This product is for the mature full length protein. The signal peptide is not included. Disulfide-linked homodimeric protein consisting of two 165 amino acid polypeptide chains.

技术指标	
Our <u>Abpromise guarantee</u> covers the use of ab217394 in the following tested applications.	
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.	
应用	HPLC Functional Studies SDS-PAGE
形式	Lyophilized

制备和贮存

稳定性和存储

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.

复溶

For lot specific reconstitution information please contact our Scientific Support Team.

常规信息

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.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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