

Recombinant human VEGFA protein ab50078

2 References

描述	
产品名称	重组人VEGFA蛋白
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 1.0-5.0 ng/ml.
纯度	> 95 % SDS-PAGE. ab50078 purity was determined also by HPLC Endotoxin level is less than 0.1 ng per µg (1EU/µg).
表达系统	Escherichia coli
Accession	<u>P15692-9</u>
蛋白长度	Full length protein
无动物成分	No
性质	Recombinant
种属	Human
序列	APMAEGGGQN HHEVVKFMDV YQRSYCHPIE TLVDIFQEYP DEIEYIFKPS CVPLMRCGGC CNDEGLECVP TEESNITMQI MRIKPHQGQH IGEMSFLQHN KCECRPKKDR ARQENCDKPR R
氨基酸	27 to 232
额外的序列信息	Recombinant Human VEGF121 is a 28.4 kDa, disulfide-linked homodimeric protein consisting of two 121 amino acid polypeptide chains.
技术指标	
Our <u>Abpromise guarantee</u> covers the use of ab50078 in the following tested applications.	
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.	
应用	SDS-PAGE Functional Studies
形式	Lyophilized
制备和贮存	
稳定性和存储	Shipped at 4°C. The lyophilized protein is stable for a few weeks at room temperature. Store at -

20°C long term.

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

复溶

Reconstitute to 1mg/ml in distilled water

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) [MM: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.

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