abcam

Product datasheet

Recombinant mouse VEGFA protein ab9954

描述

产品名称
重组小鼠VEGFA蛋白

纯**度** > 98 % SDS-PAGE.

Sterile filtered Greater than 98% pure by HPLC analyses. Endotoxin level is less than 0.1 ng per g

(1EU/g).

表达系统 Escherichia coli

蛋白长度 Full length protein

无动物成分 No

性质 Recombinant

种属 Mouse

序列 MAPTTEGEQK SHEVIKFMDV YQRSYCRPIE

TLVDIFQEYP DEIEYIFKPS CVPLMRCAGC CNDEALECVP TSESNITMQI MRIKPHQSQH IGEMSFLQHS RCECRPKKDR TKPEKHCEPC SERRKHLFVQ DPQTCKCSCK NTDSRCKARQ

LELNERTCRC DKPRR

预测分子量 39 kDa

额外的序列信息 Recombinant mouse VEGF is a 39.0 kDa disulfide-linked homodimeric protein consisting of two

165 amino acid polypeptide chains.

技术指标

Our Abpromise guarantee covers the use of ab9954 in the following tested applications.

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

应用 Functional Studies

SDS-PAGE

形式 Lyophilized

补充说明 The biological activity of this product is determined by its mitogenic activity on human human

umbilical vein endothelial cells and bovine aortic endothelial cells. Mitogenic activity was obtained for stimulation of 3H-thymidine incorporation and cell proliferation in a concentration range of 1.0-

5.0 ng/ml.

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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 Reconstitute in water to a concentration of 0.1-1.0 mg/ml.

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 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.

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

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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
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

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Terms and conditions

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