abcam

Product datasheet

Recombinant human VEGFA protein (Active) ab220553

画像数 2

製品の詳細

製品名 Recombinant human VEGFA protein (Active)

生理活性 Measured by its binding ability in a functional ELISA. Immobilized Human VEGFR1/R2 (Fc Tag)

at 1 µg/mL (100 µL/well) can bind Human VEGF121 (His Tag) with a linear range of 2-40 ng/mL.

精製度 > 95 % SDS-PAGE.

エンドトキシン・レベル < 1.000 Eu/μg **発現系** HEK 293 cells

アクセッション番号 <u>P15692-9</u>

タンパク質長 Full length protein

Animal free No

由来 Recombinant

生物種 Human

配列 APMAEGGGQNHHEVVKFMDVYQRSYCHPIETLVDIFQEYPDE

IEYIFKPS

CVPLMRCGGCCNDEGLECVPTEESNITMQIMRIKPHQGQHIG

EMSFLQHN KCECRPKKDRARQEKCDKPRR

予測される分子量 15 kDa including tags

領域 27 to 147

サブ His tag N-Terminus

配列の追加情報 This product is the mature full length protein from aa 27 to 147. The signal peptide is not included.

特性

Our <u>Abpromise guarantee</u> covers the use of ab220553 in the following tested applications.

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

アプリケーション ELISA

SDS-PAGE

Functional Studies

製品の状態 Lyophilized

備考 This product is stable after storage at:

1

-20°C to -70°C for 12 months in lyophilized state;

-70°C for 3 months under sterile conditions after reconstitution.

前処理および保存

保存方法および安定性

Shipped at 4°C. Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle. Please

see notes section.

pH: 7.40

Constituents: 95% PBS, 5% Trehalose

Lyophilized from 0.22 µm filtered solution.

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

再構成

Reconstitute with sterile deionized water to a concentration of 400 µg/ml.

関連情報

機能

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.

組織特異性

Isoform VEGF189, isoform VEGF165 and isoform VEGF121 are widely expressed. Isoform

VEGF206 and isoform VEGF145 are not widely expressed.

関連疾患

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.

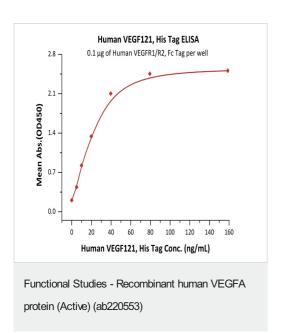
配列類似性

Belongs to the PDGF/VEGF growth factor family.

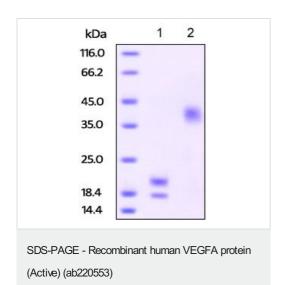
細胞内局在

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.

画像



Immobilized Human VEGFR1/R2 (Fc Tag) at 1 μ g/mL (100 μ L/well) can bind Human VEGF121 (His Tag) with a linear range of 2-40 ng/mL.



SDS-PAGE analysis of reduced (lane 1) and non-reduced (lane 2) ab220553 stained overnight with Coomassie Blue.

The protein migrates as 17 kDa and 20 kDa under reducing conditions and 35-45 kDa under non-reducing conditions on SDS-PAGE gel.

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

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