Recombinant Human VEGF-A/VEGF121(K321N) Protein

Catalog No.: RP00017

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Sequence Information

Species	Gene ID
Human	7422
Swiss Prot	**Tags**
P15692	No tag

Synonyms

VEGFA, MVCD1, VEGF, VPF, vascular endothelial growth factor A,MVCD1,VEGF,VPF,L VEGFA, VEGF A

Product Information

Source	Purification
E. coli	≥ 95 % as determined by SDS-PAGE.
Calculated MW	**Observed MW**
14.06 kDa	18 kDa

Endotoxin

< 1 EU/μg of the protein by LAL method.

Formulation

Lyophilized from a 0.22 μm filtered solution of 20mM Tris, 100mM NaCl, pH 8.0.Contact us for customized product form or formulation.

Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Background

This protein is a member of the PDGF/VEGF growth factor family. It encodes a heparin-binding protein, which exists as a disulfide-linked homodimer. This growth factor induces proliferation and migration of vascular endothelial cells, and is essential for both physiological and pathological angiogenesis. Disruption of this gene in mice resulted in abnormal embryonic blood vessel formation. This protein is upregulated in many known tumors and its expression is correlated with tumor stage and progression. Elevated levels of this protein are found in patients with POEMS syndrome, also known as Crow-Fukase syndrome.

Basic Information

Description

Recombinant Human VEGF-A/VEGF121(K321N) Protein is produced by *E. coli* expression system. The target protein is expressed with sequence (Ala207-Arg327 (Lys321Asn)) of human VEGF121 (Accession #NP_001020541.2).

Activity

1.Measured by its binding ability in a functional ELISA. Immobilized Human VEGF121 at 2 μg/mL (100 μL/well) can bind Human KDR with a linear range of 0.2-10 ng/mL.
2.Measured in a cell proliferation assay using human umbilical vein endothelial cells (HUVEC). The ED_{50} for this effect is typically 0.017-0.068 ng /mL, corresponding to a specific activity of 1.47 $\times 10^7$-5.88 $\times 10^7$units/mg.

Shipping

Lyophilized proteins are shipped at ambient temperature.
Liquid proteins are shipped at frozen temperature with dry ice.
Upon receipt, store it immediately at the temperature recommended below.

Storage

Store at -20℃

Operational Notes

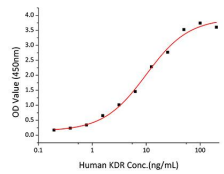
For your safety and health, please wear a lab coat and disposable gloves for handling.

Contact

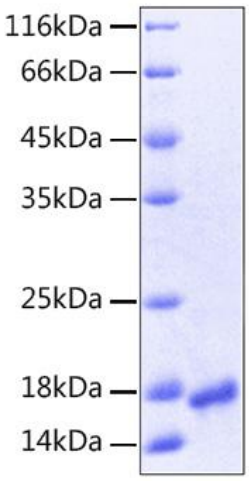
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Please visit http://abclonal.com for a complete listing of recommended products.

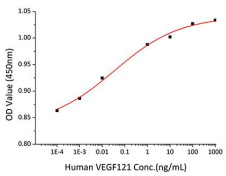
Validation Data



Immobilized Recombinant Human VEGF121 at 2 μg/mL (100 μL/well) can bind Human KDR with a linear range of 0.2-10 ng/mL.



Recombinant Human VEGF-A/VEGF121(K321N) Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



Recombinant Human VEGFA stimulates cell proliferation of the human umbilical vein endothelial cells (HUVEC). The ED_{50} for this effect is typically 0.017-0.068 ng/mL, corresponding to a specific activity of 1.47 $\times 10^7$-5.88 $\times 10^7$units/mg.