Recombinant Rat VEGF-A/VEGF164 Protein

Catalog No.: RP01323

Sequence Information

Species
Rat

Gene ID
83785

Swiss Prot
P16612-2

Tags
C-His

Synonyms
MVCD1,VAS,vascular endothelial growth factor A,Vasculotropin, VEGF,VEGFA,VEGF-A, VEGFMGC70609,VPF,VEGFA

Product Information

Source
HEK293 cells

Purification
≥ 95 % as determined by SDS-PAGE.

Calculated MW
20.07 kDa

Observed MW
25-35 kDa

Endotoxin
< 0.1 EU/μg of the protein by LAL method.

Formulation
Lyophilized from a 0.22 μm filtered solution of PBS, pH 7.4.

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

Vascular endothelial growth factor A (VEGFA),also known as Vascular permeability factor (VPF). VEGFA belongs to the PDGF/VEGF growth factor family. VEGFA is a glycosylated mitogen that specifically acts on endothelial cells and has various effects, including mediating increased vascular permeability, inducing angiogenesis, vasculogenesis and endothelial cell growth, promoting cell migration, and inhibiting apoptosis. Alternatively spliced transcript variants, encoding either freely secreted or cell-associated isoforms, have been characterized. VEGFA is produced by a group of three major isoforms as a result of alternative splicing and if any three isoforms are produced (VEGFA120, VEGFA164, and VEGFA188) then this will not result in vessel defects and death of the full VEGFA knockout in mice.

Basic Information

Description
Recombinant Rat VEGF-A/VEGF164 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Ala27-Arg190) of Rat VEGFA (Accession #NP_001274037.1) fused with an 6×His tag at the C-terminus.

Activity
1.Measured by its binding ability in a functional ELISA. Immobilized Rat VEGF164 at 1 μg/mL (100 μL/well) can bind Human KDR with a linear range of 0.03-3.6 ng/mL.
2.Measured in a cell proliferation assay using human umbilical vein endothelial cells (HUVEC). The ED_{50} for this effect is typically 0.02-0.10 ng/mL.

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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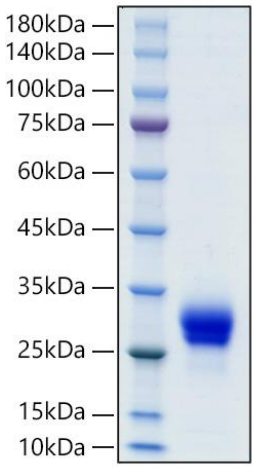
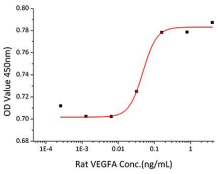
cn.market@abclonal.com.cn
www.abclonal.com.cn

For research use only. Not for therapeutic or diagnostic purposes.
Please visit http://abclonal.com for a complete listing of recommended products.

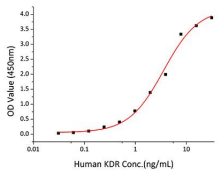
Validation Data



Recombinant Rat VEGF-A/VEGF164 Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



Recombinant Rat VEGF-A promotes the proliferation of HUVEC human umbilical vein endothelial cells. The ED_{50} for this effect is typically 0.02-0.10 ng/mL.



Immobilized Recombinant Rat VEGF164 at 1 μg/mL (100 μL/well) can bind Human KDR with a linear range of 0.03-3.6 ng/mL.