

# Recombinant Human VEGF-A/VEGF165 Protein

Catalog No.: RP01150 **Recombinant**

## Sequence Information

Species	Gene ID	Swiss Prot
Human	7422	P15692-4

### Tags

N-His

### Synonyms

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

## Product Information

Source	Purification
HEK293 cells	≥ 95 % as determined by SDS-PAGE; ≥ 95 % as determined by HPLC.

Calculated MW	Observed MW
20.01 kDa	24-26 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. 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 stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

## Background

### Basic Information

#### Description

Recombinant Human VEGF-A/VEGF165 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (A1a27-Arg191) of human VEGF165 (Accession #NP\_001165097.1) fused with a 6×His tag at the N-terminus.

#### Bio-Activity

1. Measured by its binding ability in a functional ELISA. Immobilized Recombinant Human VEGF165 at 1 μg/mL (100 μL/well) can bind Recombinant Human VEGFR2 with a linear range of 8-20 ng/mL. 2. Measured by its binding ability in a functional ELISA. Immobilized Human VEGF165 at 2 μg/mL (100 μL/well) can bind Human KDR with a linear range of 0.2-11.6 ng/mL. 3. Recombinant Human VEGF165 stimulates cell proliferation of the human umbilical vein endothelial cells (HUVEC). The ED50 for this effect is typically 0.19-0.78 ng/mL, corresponding to a specific activity of 1.28 × 10<sup>6</sup>~5.26 × 10<sup>6</sup> units/mg.

#### Storage

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.

After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

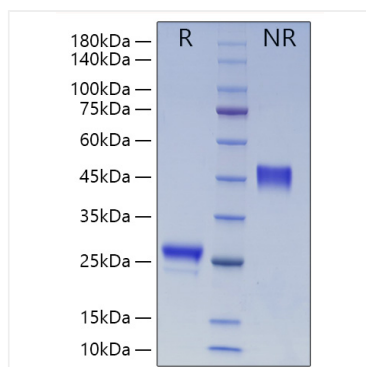
Avoid repeated freeze/thaw cycles.

## Contact

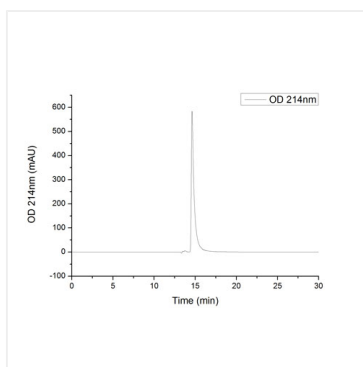
☎	400-999-6126
✉	cn.market@abclonal.com.cn



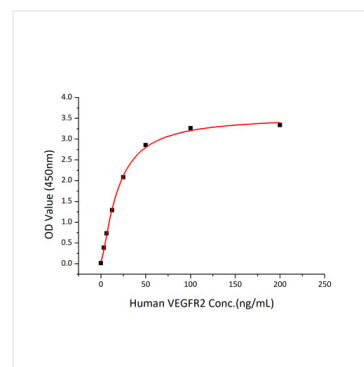
## Validation Data



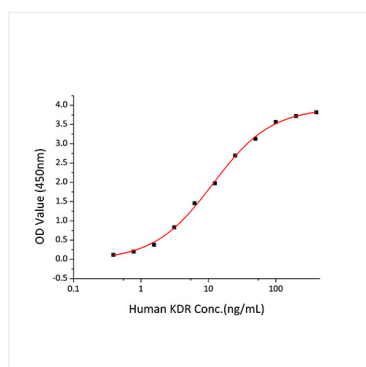
Recombinant Human VEGF-A/VEGF165 Protein was determined by SDS-PAGE under reducing (R) and non-reducing (NR) conditions.



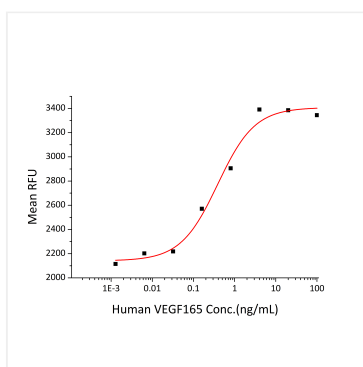
The purity of human VEGF165 Protein (Cat.RP01150) was greater than 95% as determined by SEC-HPLC.



Immobilized Recombinant Human VEGF165 at 1  $\mu\text{g/mL}$  (100  $\mu\text{L/well}$ ) can bind Recombinant Human VEGFR2 with a linear range of 8-20 ng/mL.



Immobilized Recombinant Human VEGF165 at 2  $\mu\text{g/mL}$  (100  $\mu\text{L/well}$ ) can bind Human KDR with a linear range of 0.2-11.6 ng/mL.



Recombinant Human VEGF165 stimulates cell proliferation of the human umbilical vein endothelial cells (HUVEC). The  $\text{ED}_{50}$  for this effect is typically 0.19-0.78 ng/mL, corresponding to a specific activity of  $1.28 \times 10^6 \sim 5.26 \times 10^6$  units/mg.