

# Recombinant Human VEGFR-2/KDR/CD309 Protein

Catalog No.: RP00084 **Recombinant**

## Sequence Information

Species	Gene ID	Swiss Prot
Human	3791	P35968

### Tags

C-His

### Synonyms

CD309;FLK1;VEGFR;VEGFR2;VEGF Receptor 2;KDR

## Product Information

Source	Purification
HEK293 cells	> 97% by SDS-PAGE.

Calculated MW	Observed MW
84.11 kDa	120-140 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.

## Contact

☎ | 400-999-6126

✉ | [cn.market@abclonal.com.cn](mailto:cn.market@abclonal.com.cn)

🌐 | [www.abclonal.com.cn](http://www.abclonal.com.cn)

## Background

Vascular endothelial growth factor (VEGF) is a major growth factor for endothelial cells. This gene encodes one of the two receptors of the VEGF. This receptor, known as kinase insert domain receptor, is a type III receptor tyrosine kinase. It functions as the main mediator of VEGF-induced endothelial proliferation, survival, migration, tubular morphogenesis and sprouting. The signalling and trafficking of this receptor are regulated by multiple factors, including Rab GTPase, P2Y purine nucleotide receptor, integrin alphaVbeta3, T-cell protein tyrosine phosphatase, etc. Mutations of this gene are implicated in infantile capillary hemangiomas.

## Basic Information

### Description

Recombinant Human VEGFR-2/KDR/CD309 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Ala20-Glu764) of human VEGF R2/KDR (Accession #NP\_002244.1) fused with a 6×His tag at the C-terminus.

### Bio-Activity

1. Measured by its ability to inhibit the VEGF-dependent proliferation of human umbilical vein endothelial cells (HUVEC). The ED<sub>50</sub> for this effect is typically 10-50 μg/mL in the presence of 10 ng/mL recombinant human VEGF165. | 2. Measured by its binding ability in a functional ELISA. Immobilized PE anti-human CD309 (VEGFR2) Antibody at 1 μg/mL (25 μL/well) can bind Human VEGFR2 with a linear range of 0.46-68.8 ng/mL.

### Storage

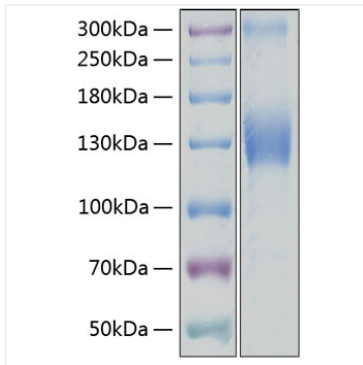
Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.

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

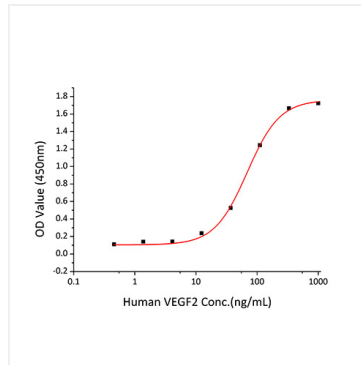
Avoid repeated freeze/thaw cycles.

## Validation Data

---



Recombinant Human VEGFR-2/KDR/CD309 Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at approximately 120-140 kDa.



Immobilized PE anti-human CD309 (VEGFR2) Antibody at 1 $\mu$ g/mL (25  $\mu$ L/well) can bind Human VEGFR2 with a linear range of 0.46-68.8 ng/mL.