RP00084

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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.

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 votex 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.

Contact

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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.

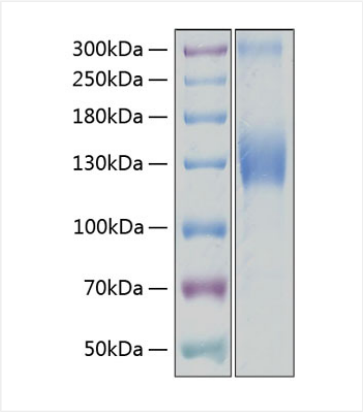
Basic Information

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.

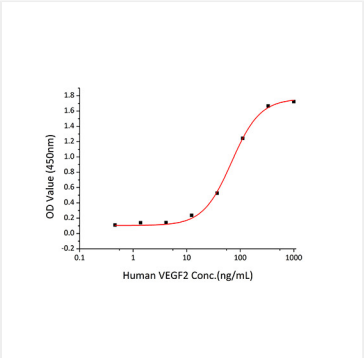
Bio-Activity
1.Measured by its ability to inhibit the VEGF-dependent proliferation of human umbilical vein endothelial cells(HUVEC). The ED₅₀ for this effect is typically 10-50 μg/mL in the presence of 10 ng/mL recombinant human VEGF165.|2.Measured by its binding ability in a functional ELISA. Immobilized 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 the lyophilized protein at -20°C to -80 °C for long term.
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 140 kDa.



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