

## Recombinant Human VEGFA 121 Protein

<b>Catalog No</b>	RP00017	<b>Category</b>	Protein
<b>Description</b>	Recombinant Human VEGFA 121 Protein is produced by <i>E. coli</i> expression system. The target protein is expressed with sequence (Ala207-Arg327 (Lys321Asn)) of human VEGFA 121 (Accession #NP_001020541.2).		
<b>Bio-Activity</b>	Measured in a cell proliferation assay using HUVEC human umbilical vein endothelial cells. The ED <sub>50</sub> for this effect is 1-6 ng/mL. The specific activity of recombinant human VEGF165 is approximately 1.7 x 10 <sup>3</sup> U/μg, which is calibrated against recombinant human VEGF165 WHO Standard.		

### Sequence Information

<b>Species</b>	Human	<b>Gene ID</b>	7422
<b>Tags</b>	No tag	<b>Swiss Prot</b>	P156922
<b>Synonyms</b>	MVCD1;VEGF;VPF		
<b>AA Sequence</b>	APMAEGGGQNHHEVVKFMDVYQRSYCHPIETLVDIFQEYPDEIEYIFKPSCVPLMRCGGC CNDEGLECVPTESNITMQIMRIKPHQGQHIGEMSFLLQHNKCECRPKKDRARQENC DKPR R		

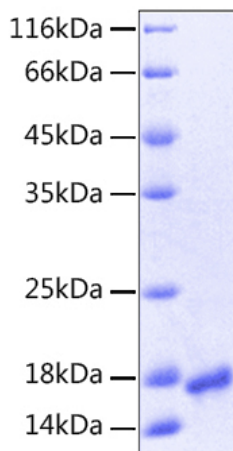
### Product information

<b>Source</b>	<i>E. coli</i>
<b>Purity</b>	> 97% by SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU/μg of the protein by LAL method.
<b>Formulation</b>	Lyophilized from a 0.22 μm filtered solution of 20 mM Tris, 100mM NaCl, pH 8.0.
<b>Reconstitution</b>	Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water.
<b>Storage</b>	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. <b>Avoid repeated freeze/thaw cycles.</b>

### 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.

### SDS-PAGE



### Bioactivity

Recombinant Human VEGFA 121 was determined by SDS-PAGE under reducing conditions with Coomassie Blue, showing a band at 18 kDa.