



## Vascular Endothelial Growth Factor Related Protein, His Tag, human recombinant (rHuVEGF-C-His-Sf9)

**Catalog No:** 97218  
**Lot No:** XXXXX  
**Source:** Sf9, Insect Cells  
**Synonyms:** VEGF-C, Vascular endothelial growth factor C, VRP, Flt4 ligand, Flt4-L, Vascular endothelial growth factor-related protein, VEGFC

### Background

VEGF-C, also known as Vascular Endothelial Growth Factor Related Protein (VRP), is a recently discovered VEGF growth factor family member that is most closely related to VEGF-D. Human VEGF-C cDNA encodes a pre-pro-protein of 416 amino acids residues. It is almost identical to the mouse VEGF-C protein. Similar to VEGF-D, VEGF-C has a VEGF homology domain spanning the middle third of the precursor molecule and long N- and C-terminal extensions. In adults, VEGF-C is highly expressed in heart, placenta, ovary and small intestine. Recombinant human VEGF-C, lacking the N- and C-terminal extensions and containing only the middle VEGF homology domain, forms primarily non-covalently linked dimers. This protein is a ligand for both VEGFR-2/KDR and VEGFR-3/FLT-4. Since VEGFR-3 is strongly expressed in lymphatic endothelial cells, it has been postulated that VEGF-C is involved in the regulation of the growth and/or differentiation of lymphatic endothelium. Although recombinant human VEGF-C is also a mitogen for vascular endothelial cells, it is much less potent than VEGF-A.

### Description

VEGF-C human recombinant- contains 129 amino acids residues and was fused to a His- tag (6x His) at the C-terminal end. As a result of glycosylation VEGF-C migrates as an 18-24 kDa protein in SDS-PAGE under reducing conditions.

### Physical Appearance

Sterile filtered white lyophilized (freeze-dried) powder.

### Formulation

Each mg of VEGF-C human contains 50 mg BSA and 1xPBS as buffer.

### Solubility

It is recommended to reconstitute the lyophilized VEGF-C in sterile 18 M $\Omega$ -cm H<sub>2</sub>O not less than 100  $\mu$ g/ml, which can then be further diluted to other aqueous solutions.

### Stability

Lyophilized VEGF-C, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution VEGF-C should be stored at 4°C between 2-7 days and for future use below -18°C. Please prevent freeze-thaw cycles.

### Purity

Greater than 90.0% as determined by (a) Analysis by RP-HPLC, (b) Analysis by SDS-PAGE.

### Activity

Measured by its ability to bind to the VEGFR-3/FLT-4 receptor in the Ba/F3-hVEGFR-3 assay. The ED<sub>50</sub> in this assay is about 4 ng/ml corresponding to a specific activity of 250,000 IU/mg.

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### Usage

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