

Alternative Name : VEGF-C,Vascular endothelial growth factor C,VRP,Flt4 ligand,Flt4-L.

Source : Sf9, Insect Cells. Vascular Endothelial Growth Factor C Rat 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. 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. The rat VEGFC 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 rat 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 rat VEGF-C is also a mitogen for vascular endothelial cells, it is much less potent than VEGF-A.

Amount :	10 µg
Purification :	Greater than 90.0% as determined by:(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.
Content :	Each mg of VEGF-C Rat contains 50mg BSA and PBS as buffer.
Storage condition :	Lyophilized Vascular Endothelial Growth Factor-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.
Amino Acid :	DTVKLAAAHYNTEILKSIDNEWRTQCMPREVCIDVGKEFGAATNTFFKP PCVSVYRCGGCCNSEGLQCMNTSTGYLSKTLFEITVPLSQGPKPVTISFA NHTSCRCMSKLDVYROVHSIIHHHHHHH.

It is recommended to reconstitute the lyophilized Vascular Endothelial Growth Factor C in sterile 18M Ω -cm H₂O not less than 100 μ g/ml, which can then be further diluted to other aqueous solutions. Measured by its ability to stimulate phosphorylation of the VEGFR-3/FLT-4 receptor in porcine aortic endothelial cells. The ED₅₀ for this effect is typically 200-300ng/ml corresponding to a Specific Activity of 3.334-5.000IU/mg.

