

Recombinant Rat Vascular Endothelial Growth Factor Related Protein (rr VEGF-C)

VEGF-C 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.

Recombinant rat VEGF-C produced in *Insect cells* 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.

Synonyms :	VRP, Flt4 ligand, Flt4L
Source:	<i>Sf9 Insect cells</i>
Formulation:	Lyophilisate from a 0.22 µm filtered solution containing BSA
Reconstitution:	Reconstitute in sterile endotoxin free water not less than 100 µg/ml
Stability:	The lyophilized protein is stable for at least 2 years at -20°C. Reconstituted rr VEGF-C is stable for at least 3 months when stored in concentrated working aliquots (100 ng/µl or higher) at -20°C. Avoid repeated freeze/thaw cycles.
Biological Activity:	Measured by its ability to stimulate phosphorylation of the VEGFR-3/FLT-4 receptor in porcine aortic endothelial cells the ED ₅₀ is typically 200 - 300ng/ml
Purity:	95% (verified by SDS-PAGE / silver stain)
Endotoxicity:	The endotoxin level is less than 0.1 ng per µg (1EU/µg) determined by LAL method
Order N°:	rr VEGF-C+Size available sizes: 2 µg, 10 µg, 50 µg

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