



Product Datasheet

Product Name	Vascular Endothelial Growth Factor Related Protein Rat
Cata No	CB500164
Source	1 Sf9, Insect Cells
Synonyms	VEGF-C, Vascular endothelial growth factor C, VRP, Flt4 ligand, Flt4-L.

Description

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.

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.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Biological Activity

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 200-300 ng/ml.

Purity

Greater than 90.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE

Formulation

The protein was lyophilized from a concentrated (1mg/ml) solution with BSA.

Stability

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.

*** For Non-Clinical Research Use Only ***