



Product Datasheet

Product Name	Vascular Endothelial Growth Factor Related Protein Human Recombinant
Cata No	CB500429
Source	<i>Sf9, Insect Cells</i>
Synonyms	VEGF-C, Vascular endothelial growth factor C, VRP, Flt4 ligand, Flt4-L, Vascular endothelial growth factor-related protein, VEGFC.

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. 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. 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.

Biological Activity

Measured by its ability to bind to the VEGFR-3/FLT-4 receptor in the Ba/F3-hVEGFR-3 assay. The ED₅₀ in this assay is about 4ng/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 1x PBS and BSA.

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.

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